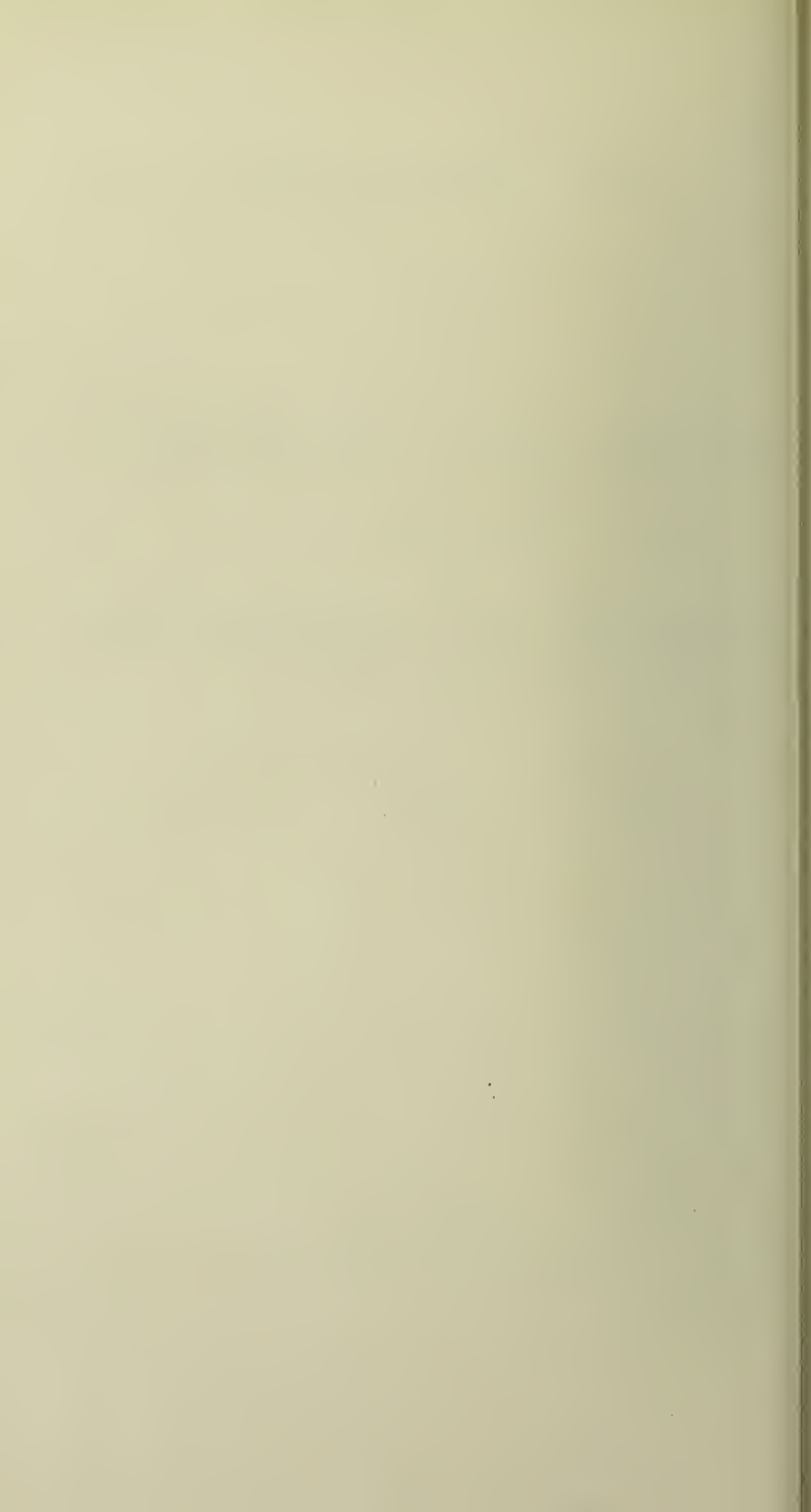


CITY OF BRADFORD

ANNUAL REPORT
OF THE
MEDICAL OFFICER

1933

IDLE, BRADFORD:
WATMOUGHS LIMITED, PRINTERS.



CONTENTS

	PAGE
PREFACE	4
PART I.	5
Population	5
Births	6
Deaths	6
Comparative Table	13
PART II. SANITARY CIRCUMSTANCES OF BRADFORD	14
A. Water Supply	14
B. Drainage and Sewerage	15
C. Closet Accommodation and Scavenging	15
D. Sanitary Inspection of District	17
E. Workshop and Shop Inspection	22
F. Premises, etc., Controlled by Bye-Laws or Regulations	26
G. Other Sanitary Work	27
PART III. FOOD	30
A. Milk Supply	30
B. Food and Drugs Adulteration Act, etc.	34
C. Slaughterhouses and Meat Inspection	38
D. Other Articles of Food	41
E. Bakehouses, etc.	45
PART IV. PREVALENCE AND CONTROL OF DISEASE	47
A. Infectious Diseases	47
B. Tuberculosis	54
C. Venereal Diseases	71
D. Other Diseases	75
PART V. MATERNITY AND CHILD WELFARE	85
A. Infant Mortality in 1933	85
B. Maternity	94
C. Infancy	99
D. General	104
PART VI. BACTERIOLOGICAL AND PATHOLOGICAL WORK	105
PART VII. HOSPITAL ACCOMMODATION	113
A. Municipal General Hospital	113
B. Infectious Diseases Hospitals	128
PART VIII. HOUSING	141
PART IX. MISCELLANEOUS	150
A. General Dental Work	150
B. Ambulance Work and Disinfection	151
C. Public Mortuary and Crematorium	151
APPENDIX TABLES	154
REPORT OF SCHOOL MEDICAL OFFICER	160

PREFACE.

The following report on the health of the City has been compiled along the lines laid down in the Memorandum of the Ministry of Health.

The chief vital statistics for the year 1933 were :—

Estimated population	...	...	295,100		
Birth-rate	...	...	13·22	per 1,000 of population	
Death-rate	...	...	14·68	per 1,000	„ „
Zymotic death-rate	...	...	0·32	per 1,000	„ „
Tuberculosis death-rate	...	...	0·88	per 1,000	„ „
Infantile mortality rate	...	...	79	per 1,000 births	

As compared with 1932 these figures show a decrease of 0·34 in the birth-rate and an increase of 0·79 in the death-rate. There was an increase of 0·06 in the zymotic death-rate, and a decrease of 0·05 in the tuberculosis death-rate, while the infantile mortality showed an increase of 4.

JOHN J. BUCHAN,

Medical Officer of Health.

TOWN HALL, BRADFORD,

31st July, 1934.

I.—VITAL STATISTICS.

Area and Population. The City of Bradford has an area of 24,342 acres, and the population as adjusted by the Registrar General for the middle of 1933 is 295,100.

DISTRIBUTION AND DENSITY OF POPULATION.

Wards					Estimated Population, 1933	Area of Wards in Acres	Persons per Acre
Allerton	...	...	...	...	17,244	2,864	6·0
Bolton	...	...	...	...	11,349	1,001	11·3
Bradford Moor	...	...	...	...	23,949	680	35·2
Clayton	...	...	...	...	5,422	1,462	3·7
East	...	...	...	...	14,801	385	38·4
East Bowling	...	...	...	...	15,487	565	27·4
Eccleshill	...	...	...	...	14,494	1,221	11·9
Exchange	...	...	...	...	2,647	118	22·4
Great Horton	...	...	...	...	23,381	1,289	18·1
Heaton	...	...	...	...	15,983	883	18·1
Idle	...	...	...	...	9,362	1,693	5·5
Listerhills	...	...	...	...	14,180	321	44·2
Little Horton	...	...	...	...	14,401	425	33·9
Manningham	...	...	...	...	20,350	449	45·3
North	...	...	...	...	10,177	353	28·9
North Bierley East	...	...	...	...	15,193	2,419	6·3
North Bierley West	...	...	...	...	13,933	1,836	7·6
South	...	...	...	...	13,128	303	43·3
Thornton	...	...	...	...	6,123	2,251	2·7
Tong	...	...	...	...	6,491	2,659	2·4
West	...	...	...	...	7,414	162	45·8
West Bowling	...	...	...	...	19,591	1,003	19·5
City	...	...	...	...	295,100	24,342	12·1

The average density of population varies from 2·4 persons per acre in Tong Ward to 45·8 in the West Ward.

Births. The number of births registered during the year was 3,901, of which 2,018 were males and 1,883 females. This gives a birth-rate for the year of 13·22 per 1,000, a decrease of 0·34 per 1,000 from last year.

AVERAGE QUINQUENNIAL BIRTH-RATES FROM 1871.

1871-75	...	39·0	1896-1900...	25·1	1921-25	...	17·9	
1876-80	...	35·6	1901-05	...	22·6	1926-30	...	15·2
1881-85	...	31·1	1906-10	...	20·1	1931	...	13·6
1886-90	...	29·8	1911-15	...	19·0	1932	...	13·6
1891-95	...	27·5	1916-20	...	15·4	1933	...	13·2

Illegitimacy. Of the 3,901 births registered, 210 or 5·4 per cent., were illegitimate. This rate is 0·3 per cent. lower than in 1932.

Deaths. The total deaths occurring in Bradford in 1933 was 4,482; after making additions and deductions of persons dying away from their place of residence the number becomes 4,332. The corrected death-rate is therefore 14·68 per 1,000, or 0·79 per 1,000 higher than in 1932.

AVERAGE QUINQUENNIAL DEATH-RATES FROM 1871.

1871-75	...	25·9	1896-1900...	17·9	1921-25	...	14·1	
1876-80	...	22·3	1901-05	...	16·3	1926-30	...	14·2
1881-85	...	19·9	1906-10	...	15·1	1931	...	14·2
1886-90	...	20·9	1911-15	...	15·5	1932	...	13·9
1891-95	...	19·7	1916-20	...	16·0	1933	...	14·7

The death-rate among the male population in 1933 was 16·03, and among the female population 13·50 per 1,000.

The birth and death-rates in the various wards of the city are set out in the table on page 7.

BIRTH AND DEATH RATE IN EACH WARD.

Ward	Number		Rates per 1000	
	Births	Deaths	Births	Deaths
Allerton	267	190	15·48	11·02
Bolton	143	156	12·60	13·75
Bradford Moor...	272	313	11·36	13·07
Clayton	71	53	13·10	9·77
East	223	237	15·40	16·01
East Bowling ...	207	242	13·37	15·63
Eccleshill	213	179	14·01	12·35
Exchange	56	43	21·16	16·24
Great Horton ...	261	375	11·16	16·04
Heaton	148	223	9·26	13·95
Idle	128	102	13·67	10·90
Listerhills	212	252	14·95	17·77
Little Horton ...	150	216	10·42	15·00
Manningham	325	319	15·98	15·68
North	169	182	16·61	17·88
North Bierley East	207	228	13·62	15·01
North Bierley West	155	211	11·13	15·14
South	219	214	16·68	16·30
Thornton	79	82	12·90	13·39
Tong	83	84	12·80	12·94
West	106	136	14·30	18·34
West Bowling ...	207	295	10·57	15·06
City	3,901	4,332	13·22	14·68

Mortality at Different Ages. The following Table shows the total deaths in each age group during the past six years.

NUMBER OF DEATHS IN EACH YEAR AT DIFFERENT AGE PERIODS.

Age	1928	1929	1930	1931	1932	1933
Under 1 year	307	346	327	292	302	310
1— 2 years	59	114	67	61	35	59
2— 5 „	53	88	62	57	49	71
5—15 „	84	102	85	80	65	82
15—25 „	137	131	122	112	123	109
25—45 „	421	439	396	420	390	414
45—65 „	1180	1342	1203	1260	1216	1274
over 65 „	1684	1966	1758	1995	1937	2013

The infantile mortality rate for 1933 was 79 per 1,000 births, as against 75 for 1932. The mortality between one and sixty-five years was 7·5 per 1,000, and over sixty-five years 88·8 per 1,000.

Public Institutions. The accommodation in all kinds of institutions available for Bradford amounts to more than 3,500 beds or 1·2 per cent. of the population or about 1 in 80.

VOLUNTARY HOSPITALS, 1933.

Hospital	Number of beds	Character of cases	Cases admitted to Hospital	Cases treated in outdoor departments
Bradford Royal Infirmary ...	215	General ...	4,969	16,160*
Bradford Children's Hospital	74	Children ...	1,750	3,340
Royal Eye and Ear Hospital...	94	Eye and Ear	3,390	12,625
Totals	383	—	10,109	32,125

* Exclusive of dental cases.

At the out-patient department of the Bradford Royal Infirmary 9,556 persons were treated as out-patients, and 6,504 as casualty cases, and 1,140 as dental cases. The number of attendances made by out-patients was 60,010, and by casualty cases 29,579. At the orthopædic department 62,824 treatments were given.

The total number of patients admitted to municipal hospitals in 1933 was 10,647. The nature of the cases is given elsewhere in this report in dealing with each hospital. On the 31st December, 1933, there were 256 patients maintained in institutions for the mentally defective.

At the end of the year the number of persons in receipt of relief in Bradford was: Institutional, 1,189, and Domiciliary, 9,753, equal to 36·9 per 1,000 of the population.

PROPORTION PER 1,000 OF POPULATION IN RECEIPT OF RELIEF.

	Indoor	Outdoor	Total Chargeable
England and Wales	4·6	29·4	34·0
Bradford	4·0	32·9	36·9

The number of deaths in public institutions is given in the tables on pages 10 and 11.

DEATHS IN PUBLIC INSTITUTIONS.

Name of Institution	1931	1932	1933
Bradford Public Assistance Institutions	101	100	104
Clayton Public Assistance Institution	21	24	28
Other Public Assistance Institutions	2	4	3
Menston Asylum	24	31	48
Storthes Hall Asylum	38	40	25
Other Asylums	5	4	7
Royal Infirmary	174	182	194
Duke of York Home	27	27	26
Children's Hospital	62	63	91
Eye and Ear Hospital	12	8	15
St. Catherine's Home	4	9	4
Other Voluntary Hospitals	18	20	16
St. Luke's Hospital	940	996	1001
Leeds Road Hospital	45	40	61
Bierley Hall Hospital	35	44	50
Grassington Sanatorium	9	4	7
North Bierley Joint Hospital	1	—	2
Calverley Joint Hospital... ..	—	—	1
Other Institutions	3	8	5
Total	1,521	1,604	1,688

It will be noted that in 1933, 135 deaths, or 3·1 per cent. of the total deaths, occurred in Public Assistance Institutions; 80 deaths, or 1·8 per cent., in Lunatic Asylums; 346 deaths, or 8·0 per cent., in Voluntary Hospitals; and 1,125 deaths, or 26·0 per cent., in Municipal Hospitals.

The percentage of the total deaths in the city occurring in public institutions in 1933 was 39·0. During the past 15 years there has been a continuous increase in the proportion of deaths occurring in public institutions, the rise in the percentage of total deaths in each year being from under 25 per cent. to 39. The increase occurs both in municipal and voluntary hospitals; in lunatic asylums there has been a decrease.

The age incidence of deaths in Public Institutions is shown in the following table :—

	Public Assistance Institutions	Lunatic Asylums	Voluntary Hospitals	Municipal Hospitals	Other Institutions	Total	Per cent. of Deaths at each age.
Under 1	—	—	69	89	—	158	51·0
1— 2	—	—	13	26	—	39	66·1
2— 5	—	—	19	21	—	40	56·3
5—15	—	—	16	34	—	50	61·0
15—25	2	—	12	52	—	66	60·5
25—45	1	22	50	146	—	219	52·9
45—65	23	34	117	326	1	501	39·3
65 and over	109	24	50	431	1	615	30·6
Total ...	135	80	346	1125	2	1688	39·0

This table shows that nearly 60 per cent. of the deaths between one year and forty-five years in the City occur in Public Institutions. It indicates that in the case of serious disease among the young a very large proportion now resort to hospitals for treatment.

Certification of Deaths. 3,809 deaths, 87·9 per cent., were certified by medical practitioners, and 383, or 8·8 per cent., by the coroner after inquest, and 140, or 3·3 per cent., where, after enquiries were made by the coroner, it was found that inquests were unnecessary. The table on the following page shows the causes of death as found at the inquests held.

RETURN SHOWING THE NUMBER OF INQUESTS HELD, AND VERDICTS
RETURNED DURING THE YEAR ENDED 31ST DECEMBER, 1933.

CAUSE OF DEATH	Wilful Murder	Manslaughter	Temporary Insanity	Intemperance	Anthrax	Accidental	Abortion	Natural Causes	Open Verdicts	Totals	Remarks
Violence... ..	1	...	...	...	...	...	...	...	1	2	
Burns and Scalds	13	...	...	...	13	
Railways	2	...	...	1	3	
Motor Vehicles...	...	1	...	...	...	35	...	...	2	38	
Other Conveyances	5	...	...	...	5	
Machinery	1	...	...	...	1	
Falls	53	...	...	1	54	
Suffocation	1	...	...	...	1	
Drowning	2	...	...	...	2	
Poisoning	1	...	...	...	1	
Other Causes	1	2	22	...	...	2	27	
SUICIDES:—											
Drowning	3	...	...	...	...	...	1	4	
Hanging	4	...	...	...	...	...	1	5	
Poisoning	23	...	...	...	...	...	3	26	
Other Means	5	...	...	...	...	...	1	6	
Natural Causes...	195	...	195	
Totals	1	1	35	1	2	135	...	195	13	383	

There were also 140 cases where, after enquiries were made, the Coroner found that inquests were not necessary.

TABLE A.

VITAL STATISTICS OF BRADFORD FROM 1902.

Year	Population	Birth Rate	Death Rate	Zymotic Death Rate	Infantile Mortality Rate
1902	280,833	23·3	15·7	1·38	138
1903	281,799	23·4	16·2	1·32	148
1904	282,568	22·2	17·4	2·43	167
1905	283,441	21·3	15·3	1·45	144
1906	284,314	20·9	16·2	1·97	152
1907	285,189	20·1	14·7	0·91	124
1908	286,071	21·0	15·7	1·46	143
1909	286,954	19·2	14·6	0·68	116
1910	287,839	19·1	14·3	1·26	127
1911	288,723	19·0	15·0	1·60	140
1912	289,618	19·3	14·5	0·82	98
1913	290,540	19·6	15·1	1·10	128
1914	291,482	19·6	15·7	1·22	122
1915	*280,737	17·4	16·9	1·22	123
1916	*271,105	16·67	15·99	0·61	118
1917	*266,338	13·06	15·34	0·81	132
1918	*259,707	13·30	19·13	1·07	123
1919	*282,714	13·40	16·27	0·31	113
1920	293,979	20·52	13·31	0·42	93
1921	291,100	19·57	13·72	0·66	109
1922	291,300	17·92	14·02	0·36	87
1923	290,800	18·19	13·75	0·48	78
1924	290,200	16·94	14·86	0·31	92
1925	290,200	16·63	13·97	0·65	95
1926	288,700	16·31	13·58	0·47	92
1927	293,200	14·73	14·57	0·52	92
1928	288,500	15·32	13·60	0·38	69
1929	289,200	15·03	15·66	0·50	80
1930	293,254	14·92	13·45	0·44	75
1931	300,900	13·56	14·21	0·24	71
1932	296,300	13·56	13·89	0·26	75
1933	295,100	13·22	14·68	0·32	79

* Civil population.

II.—SANITARY CIRCUMSTANCES OF BRADFORD.

(A) *Water.* The water supply of Bradford, as provided by the Corporation Waterworks, is obtained from several upland surface sources and is distributed throughout the city by gravitation. The supply is constant and the water, on chemical analysis, exhibits a high standard of purity. Samples are taken regularly from the various sources of supply and distributing points in the City and the bacteriological results of the examinations made are shown on page 110. Generally the water is a soft upland water and one source of supply only exhibits in its natural state any appreciable degree of plumbo-solvency. This is the supply from Thornton Moor, 1,241 feet above sea level, where water is collected from peaty uplands to the west of the city. This water is treated at the reservoir to reduce the plumbo-solvency.

Average Results of Analyses for Plumbo-solvency of Water as distributed.

	Grains per Gallon	
	Lead	Lead taken up in 24 hours
THORNTON MOOR WATER SUPPLY.		
48 samples before 8 a.m.	0·0019	0·0632
48 samples after 1 p.m.	0·0008	0·0643
INTERMEDIATE LEVEL SUPPLY.		
48 samples before 8 a.m.	0·0008	0·0568
48 samples after 1 p.m.	0·0000	0·0506
LOW LEVEL WATER SUPPLY.		
48 samples before 8 a.m.	0·0007	0·0503
48 samples after 1 p.m.	0·0001	0·0531

At the end of 1933, 54 farms and 159 houses in isolated localities were not connected with the Corporation mains. The supplies in these cases were under constant supervision.

There were 21 samples of suspected water submitted for chemical examination, of which 10 were reported against; in addition 12 samples

of swimming-bath water were examined chemically, 6 of which gave good results, while the remainder contained a rather high amount of albuminoid ammonia.

The number of notices served to secure a proper water supply (Sec. 53 Bradford Corporation Act, 1925) was 31, affecting 66 houses and farms.

(B) *Drainage and Sewerage.* There are 198 farms and 882 houses not connected with the Corporation sewers, 38 of the farms and 68 houses being in the Clayton area. Two farms and 18 houses have been connected during the year and 1 cesspool has been abolished.

(C) *Closet Accommodation and Scavenging.* During the year 477 new water closets were provided. These included 166 additional water closets for dwelling-houses. Seventy-eight water closets were substituted for waste water closets (tipper), and 92 were substituted for privies, the ashpits in connection with them being replaced by dust bins. Ninety-nine water closets were provided for factories and workshops, and 42 for other premises.

ESTIMATE OF SANITARY ACCOMMODATION AT THE END OF 1933.

(i.) Dwelling-houses.

	No. of Houses	Water Closets	Waste Water Closets	Privies
More than one sanitary convenience to each house ...	7003	12843	—	—
	230	—	463	—
	11	—	—	24
One to each house ...	53268	53268	—	—
	6039	—	6039	—
	429	—	—	429
Less than one to each house	20415	10753	—	—
	114	—	57	—
	947	—	—	467
Totals ...	88456	76864	6559	920

Apart from the houses in clearance areas, the work of conversion of privy middens has now been practically completed; in clearance areas there are still 145 privies, while the remaining number are on farms and outlying houses in the city where sewers are not reasonably available.

SUMMARY.			Number	Percentage
Houses with water closets ...	...	...	80,521	90·3
Houses with waste water closets ...	...	...	7,283	8·2
Houses with privies ...	...	...	1,387	1·5

(ii.) **Business and other Premises.**

	No. of Premises	Water Closets	Privies
Factories, workshops, and other business premises ...	4873	12930	20
Places of worship, schools, public institutions, clubs, &c.	709	4716	59
Totals ...	5582	17646	79

1933

Number of water closets ...	...	94,510	
Number of waste water closets ...	...	6,559	
Number of privies ...	...	999	
		————	102,068
Number of dry ashpits ...	...	5,043	
Number of dust bins ...	...	77,276	
		————	82,319

PROGRESS OF THE PROVISION OF WATER CLOSET ACCOMMODATION IN
EXISTING PREMISES.

Year	Dwellingshouses W.C's.	Factories and Workshops W.C's.	Other Premises W.C's.	Totals W.C's.
1923	2124	131	20	2275
1924	1503	89	31	1623
1925	1598	97	25	1720
1926	1363	107	43	1513
1927	834	101	64	999
1928	432	115	32	579
1929	369	111	19	499
1930	289	87	28	404
1931	276	64	15	355
1932	332	103	20	455
1933	336	99	42	477

The number of times each ashpit was emptied by the Cleansing Department during the year was on the average 9. The dust bins are emptied each week. During the year 3,415 dust bins have been provided and 1,597 ashpits abolished.

Four hundred and fifty-six plans have been approved by the Health Committee for the construction of works, as follows:—336 water closets affecting 394 dwelling-houses; 34 water closets affecting 26 licensed premises; 11 urinals affecting 11 licensed premises; 99 water closets affecting 57 factories and workshops; 8 water closets affecting schools, clubs, and other premises, and 94 reconstruction schemes affecting 579 dwelling-houses.

(D) *Sanitary Inspection of District.* The number of tests to drains and sanitary fittings made by the Sanitary Inspectors during the year was 4,754, of which 2,834 were volatile tests with 281 positive results, 1,883 were coloured water tests with 267 positive results, 37 smoke tests with 10 positive results. In 1,087 of the houses tested infectious disease was present in 295 cases, diphtheria with 17 positive results, in 13 cases of enteric fever with no positive result, and in 743 other diseases with 19 positive results. In 23 cases the system of drainage was such as to render impracticable the application of a test.

The drainage of 12 blocks of property, comprising 63 houses, was dealt with under Section 41 of the Public Health Act, 1875, as against 149 houses last year. The defects were found as the result of tests applied to the drains.

The District Sanitary Inspectors have made 49,368 inspections and visits for the investigation and suppression of nuisances. The total number of nuisances reported was 3,207. The statement on the following pages shows the nature and the amount of work performed by the Inspectors during the year, together with the figures for the five preceding years for comparison.

During the year 709 complaints as to nuisance were received, as against 978 the previous year. The number of statutory notices served for the abatement of nuisances was 1,688, as against 1,724 yast year. The number of notices served for the abolition of ashpits was 992, and the number of notices served for the provision of dust bins was 1,237. The houses affected by the ashpit notices were 2,068 and the houses affected by dust bin notices were 2,361. The number of preliminary notices served for dangerous places to be made secure was 28, as against 8 the previous year. There were 48 of these places dealt with, as against 50 last year. Six cases were reported for prosecution at the City Court for failing to obey notices issued from this department, all of which were withdrawn, the work having been done either before the hearing of the case or during the time of adjournment.

PARTICULARS OF WORK DONE, 1928-1933.

Routine Visits and Inspections—

	1928	1929	1930	1931	1932	1933
No. of Houses inspected under Public Health Acts	5147	5082	5757	4464	11537	9777
No. of Houses in respect of which notices were served requiring defects to be remedied	1197	1172	1459	1360	8496	3207
No. of Houses where defects remedied after formal notice						
(a) By owners	1183	1144	1417	1328	4167	3161
(b) By L.A. on default ...	—	—	14	12	17	20
No. of ordinary visits	22342	23146	24137	30215	38693	26170
No. of Houses rendered fit without service of formal notices	947	556	720	526	1195	1704

Inspections and Visits—

No. of complaints investigated	1625	1586	1767	1735	1916	2062
No. of ordinary visits and inspections (other than dwelling-houses)	—	—	—	—	4884	2984
No. of Factories and Workshops visits and inspections	1115	1276	1328	1626	2584	3007
No. of Offensive Trade Premises visits and inspections	273	355	396	653	662	171
No. of Schools inspected	719	832	812	708	522	332
No. of Graveyards inspected	150	46	51	36	36	24
No. of visits to Common Lodging Houses (Day)	1137	1200	694	678	424	199
(Night)	7	10	—	17	38	33
No. of Houses let in lodgings visited	—	—	—	—	10	283
No. of Canal Boats inspected	112	80	31	65	43	46
No. of Cinema visits	181	174	159	109	100	104
No. of Piggeries visited	—	—	—	268	272	184

Drainage and Sanitary Arrangements—

Choked drains cleansed	904	614	862	743	607	463
Drains amended	592	643	734	600	630	546
Drains reconstructed	410	387	510	281	270	270
Extra drains provided	124	130	178	104	145	163
Cellars drained	28	41	27	27	39	29
Drains underneath houses abolished	7	15	40	9	25	38
Drainage systems intercepted from sewer	7	8	22	11	13	9
Open drain inlets trapped	5	23	28	11	19	72
Waste pipes trapped	21	47	87	22	55	90
Waste pipes disconnected	42	59	109	30	57	94
Rainwater pipes disconnected	133	130	210	115	134	140
Rainwater conductors repaired or renewed	1128	1001	1181	879	1030	1595
Sinks repaired or renewed	101	144	138	170	437	320
New sinks provided	55	84	137	100	196	273
No. of Houses reported for provision of Water Closets	385	108	67	186	106	72
No. of Houses reported for provision of Privies	3	—	2	—	1	—
Water closet pedestals renewed	138	264	153	144	153	133
Water closets and flushing apparatus repaired	287	532	297	292	300	247
Water closets cleansed	78	45	49	34	49	17
Water closet apartments cleansed and limewashed	487	410	413	161	203	79
W.C. apartments properly lighted and ventilated	5	15	12	18	12	28
General repairs to Water Closets	430	811	462	454	504	545
Additional W.C. accommodation provided	200	175	127	144	48	116
Soil pipes repaired or renewed	23	37	34	27	38	132
Indoor soil pipes abolished	4	1	—	3	—	4
Privy apartments cleansed and limewashed	29	22	20	6	1	—
Privy structures abolished	57	55	46	56	132	77
Deposits of slops in ashpits prohibited	5	45	18	—	9	4
Ashpits abolished	20	1611	6502	7608	7222	1597
Dust bins repaired or renewed	662	570	829	1102	589	457
Houses provided with new dust bins	2277	7574	9732	12049	11237	3415
Urinals cleansed, amended, or screened	11	9	18	11	7	8
Urinals remodelled	2	5	5	4	6	6
New Urinals provided	5	3	1	5	5	4

Dwelling-houses, etc.—

Dampness excluded	224	127	298	237	746	799
Roofs repaired	343	168	334	279	662	684
Houses or parts cleansed and limewashed	158	132	129	148	142	74
Vermineous houses dealt with	—	—	—	—	14	125
Ventilation improved	418	352	542	453	1124	1193
Windowcoords repaired or renewed	652	357	752	641	1244	1291
Lighting improved	129	97	102	117	221	269
General repairs executed	4401	3938	4923	5217	7310	4924
Kitchen ranges repaired or renewed	792	609	784	842	790	697

Washing coppers provided or renewed ...	31	28	39	47	67	131
Handrails provided	10	12	23	16	18	13
New food stores provided and ventilated	4	8	19	22	30	113
Water supply improved	26	61	73	21	58	74
Houses supplied with water	11	69	17	27	17	16
Outbuildings repaired	45	61	47	35	110	132
Overcrowding abated	33	47	28	22	49	44
Cellar areas cleansed	11	4	26	6	25	7

Courts, Back-yards, Stable-yards, etc.—

Yard and passage paving repaired ...	147	163	236	215	585	708
Yards re-paved	2	3	13	11	27	9
Yards and passages newly paved	5	4	4	8	20	5
Yards cleansed	80	92	78	57	27	21
Passages cleasured and limewashed ...	360	226	176	47	331	275
Manure pits repaired	1	3	3	4	6	2
Manure pits provided	—	—	—	2	3	1

Keeping of Animals, etc.—

Improper keeping of swine prohibited ...	7	4	—	8	10	—
Piggeries repaired	—	—	—	—	26	1
New Piggeries provided	—	—	—	—	7	—
Piggeries abolished or disused	—	—	—	—	22	6
Improper keeping of fowls, etc., prohibited	19	18	11	17	16	18
Accumulations of offensive matter, etc., removed	79	92	65	52	80	49
Accumulations of manure removed ...	48	33	16	19	28	18

Infectious Diseases—

No. of Zymotic Diseases investigated ...	23068	10793	6320	5177	3559	3455
--	-------	-------	------	------	------	------

Factories and Workshops—

Ventilation improved	27	10	29	11	30	26
Lighting improved:—						
(a) Day	—	—	—	—	2	1
(b) Night	—	—	—	—	12	7
Intervening space provided to W.C.s ...	—	—	—	—	131	41
Separate approaches to W.C.s provided	—	—	—	—	20	11
Screening, Doors and Fastenings provided	—	—	—	—	57	10
Additional W.C.s provided	41	37	56	41	33	25
New Urinals provided	5	3	1	5	5	7
Cleansed and limewashed	—	—	—	—	60	20

Drain Testing—

Number of volatile tests	Positive	203	293	271	199	237	281
	Negative	708	1072	1142	891	2123	2553
Number of colour tests	Positive	256	330	272	236	314	267
	Negative	1233	1458	1351	1160	1417	1616
Number of smoke tests (Rocket)	Positive	17	16	19	22	31	10
	Negative	15	15	24	85	79	27

Miscellaneous Nuisances—

Dangerous places referred to City Engineer	47	82	67	48	62	63
Dangerous places made secure	38	77	55	37	50	48
Choked Street Gulleys reported	568	537	286	216	143	96
Wastes of Water reported	—	—	—	—	—	82
Samples of Water taken for—						
(a) Chemical Analysis	204	229	308	132	320	301
(b) Bacteriological Examination ...	—	—	—	—	144	98
Premises dealt with under Rats and						
Mice (D) Act, 1919	51	36	35	27	14	18
Offensive Trades	—	—	—	—	2	24
Effluvium Nuisances abated	15	39	17	20	13	12

The number of visits made to Burial Grounds in the City was 24, as against 36 last year. No irregularities were observed. Under the terms of licenses issued from the Home Office the District Inspectors supervised the exhumation and re-interment of one body at Scholemoor Cemetery.

During the year the Woman Sanitary Inspector has made 275 visits to the women's conveniences in the public streets, parks, cemeteries and recreation grounds, for the purpose of making inspection as to the condition of the conveniences set apart for the use of females, with the result that in 15 instances nuisances were found. These were notified verbally to the person in charge and abated.

(E) *Workshop and Shop Inspection, etc.***(1) FACTORIES, WORKSHOPS AND WORKPLACES.****I.—INSPECTIONS (INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS).**

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories (Including Factory Laundries)	407	11	...
Workshops (Including Workshop Laundries)	2221	37	...
Workplaces (Other than Outworkers' premises)	591	18	...
TOTALS ...	3219	66	...

II.—DEFECTS FOUND IN FACTORIES, WORKSHOPS, AND WORKPLACES.

Particulars	Number of Defects			Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts:*</i>				
Want of cleanliness	50	63	...	...
Want of ventilation	7	14	...	...
Overcrowding	1	1	...	...
Want of drainage to floors	14	11	...	...
Other nuisances	174	121	...	...
Sanitary accommodation { insufficient	13	10	...	...
{ unsuitable or defective	50	38	...	...
{ not separate for sexes	7	3	...	...
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bake-house (S. 101) ... ..	...	...	...	...
Other offences (excluding offences relating to outwork and offences under the sections mentioned in the schedule to the Ministry of Health (Factories and Workshops, Transfer of Powers Order, 1921) ... ..	...	...	...	...
TOTALS	316	261	...	...

* Including those specified in Sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

III.—REGISTERED WORKSHOPS, ETC.

Workshops on the Register (S.131) at the end of the year	Number
Workshops	1759
„ Bakehouses	306
Factory Bakehouses	182
Total	2247

IV.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories:—	
Failing to affix Abstract of the Factory and Workshop Acts (S. 133), 1901	19
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Act, but not under the Factory and Workshop Act (S. 5), 1901	48
Other Reports to H.M. Inspectors	10
Underground Bakehouses (S. 101):—	
Workshop Bakehouses in use at the end of the year	9
Factory Bakehouses in use at the end of the year	21
Homework—Secs. 107 to 110:—	
Employers failing to keep list of outworkers (form 44)	10
Notices served on employers for failing to keep or send in lists	242
List of outworkers not received	—
Cases of outwork in infected and unwholesome premises	—
Outworkers visited	188
Prosecutions for failing to send in list of outworkers	—
Limewashing and painting of Bakehouses (S. 99):—	
Occupiers requested to limewash or cleanse walls and ceilings of bakehouses	144

(2) SHOPS ACTS, 1912—1930.

Shops Inspected. The total number of shops on the Register is 7,697, and the number of visits and investigations made was 8,992. The number of shops visited in which young persons were employed was 748, and in 129 instances the employers had failed to exhibit the notice referring to the specific provisions of the Act. All the employers were cautioned.

In 48 shops no notice specifying the day of the weekly half-holiday was displayed, and the offenders were all cautioned. In 42 instances shops were found open and the occupiers selling non-exempted articles on the weekly half-holiday, and 11 persons were found hawking on the day fixed for the closing of shops. Two of these offenders were

prosectued, and the remainder cautioned. The occupiers of 233 shops were found not displaying the notices specifying the exempted trades for which they were remaining open after the closing hour of the weekly half-holiday, or at night, and they were all cautioned. In 328 cases employers had failed to provide the prescribed form relating to their assistants' weekly half-holiday; 1 of the offenders was prosecuted and the remainder cautioned. In 16 cases shop assistants were found employed after half-past one o'clock on their specified weekly half-holiday, and the offenders were all cautioned. In 11 cases shop assistants were not being allowed correct intervals for meals; all the employers were cautioned.

Closing Orders. During night visits and observations after the closing hours affecting certain classes of shops, 3 shops were found open after the prescribed closing hour, and the shop-keepers were cautioned. In 95 shops official copies of Closing Orders, etc., were not displayed. All these offenders were cautioned.

Shops (Hours of Closing) Act 1928. As a result of night inspections 3 shop-keepers and 1 hawker were found carrying on business after the closing hour. Two offenders were prosecuted and the remainder cautioned.

Section 72. P.H.A. 1925. Offences relating to food storage in shops referred to Food Inspectors, 30.

Hairdressers' and Barbers' Shops (Sunday Closing) Act 1930. During visits and observations on Sunday mornings two offenders were found to be carrying on business. One was prosecuted and the other cautioned.

ADMINISTRATION OF THE SHOPS ACTS, 1912-1930.

Summary of Inspections and Offences.

INSPECTIONS.

Number of shops on register	7,697
Number of shops visited where assistants are employed ...	2,547
Number of shops visited where young persons are employed ...	748
Total number of inspections	8,992

OFFENCES.

Nature of Offence	No. of Cases	No. of Warnings	Prosecutions		
			No. of Cases	Fines £ s. d.	Costs £ s. d.
<i>Shops Act, 1912—</i>					
Abstract relating to young persons not displayed ...	129	129	—		
Prescribed form relating to half holiday of assistants not displayed	328	327	1	1 0 0	
Young persons employed more than 74 hours per week ...	—	—	—		
Young persons employed in shop after being employed in factory for permitted hours...	—				
Correct meal times not allowed to assistants	11	11			
Half holiday not allowed to assistants	16	16	—		
Seats not provided for female assistants	—	—			
Notice of day of weekly half holiday not fixed	48	48			
Shop open after closing hour on weekly half holiday ...	42	40	2	2 0 0	
Hawking on weekly half holiday after hour fixed by Order ...	11	11	—		
Shop open after closing hour fixed by Closing Order ...	3	3			
Hawking after hour fixed by Closing Order	—				
Official copy of Closing Order not displayed in shop ...	95	95			
Notices not displayed in mixed shops after closing hour ...	233	233			
<i>Shops (Hours of Closing) Act, 1928—</i>					
Shop open after closing hour...	3	2	1	Dismissed	
Hawking after closing hour ...	1	—	1	10 0	
<i>Hairdressers' and Barbers' Shops (Sunday Closing) Act, 1930—</i>					
Hairdresser carrying on business on Sunday	2	1	1	1 0 0	
Totals	922	916	6	£4 10 0	—

(3) RAG FLOCK ACT, 1911—1928.

During the year 8 samples of rag flock were submitted to the City Analyst, and 1 sample was found not to comply with the standard of cleanliness laid down in the Regulations under the Act. Legal proceedings were instituted in regard to this sample, but the summons was dismissed, each party to pay their own costs.

(F) *Premises, Etc., Controlled by Bye-laws or Regulations.*

(1) COMMON LODGING HOUSES.

At the end of the year there were 16 registered common lodging houses in the city, comprising 92 sleeping rooms, and affording nightly accommodation for 811 males, 22 females, and 24 couples.

The total number of persons accommodated during the year was 185,394, as against 166,327 the previous year. The nightly average was 507, representing 57·5 per cent. of the accommodation available. This shows an increase of 8·5 per cent. on the previous year.

The following table shows the number of nights spent by single men, women, young persons, and couples in common lodging houses during the year :—

ADULTS			8 to 21 years		Under 8 years	
Males	Females	Couples	Males	Females	Males	Females
172658	4691	3677	7	—	178	485

The whole of the houses have been limewashed and cleansed in accordance with the Public Health Act, 1875.

One application for transfer of Registry as keeper was granted and one house was closed under the Housing Act, 1930, Section 19.

The total number of inspections made during the year was 232, 33 of which were night visits. There have been no cases of infectious disease reported during the year in any Common Lodging House. No difficulties have been experienced in gaining admittance and it has not been necessary to resort to Police Court proceedings.

(2) CANAL BOATS.

The number of boats inspected within the city boundary during the year was 46. The structural and sanitary conditions of all these were satisfactory. The defects for which notices were outstanding at the end of the previous year were remedied during the year under review.

(3) OFFENSIVE TRADES, Etc.

The number of offensive trades within the city is 349, of which 298 are fish friers. Two hundred and sixty-three of the fish friers and one other trade are subject to annual license. The number of visits of inspection made to offensive trades other than fish friers was 171.

(4) SCHOOLS.

The number of visits made for the sanitary inspection of schools was 332, as against 522 last year. Minor defects have been noted and remedied at various schools.

(5) INSPECTION OF CINEMAS AND OTHER PLACES OF PUBLIC ENTERTAINMENT.

The periodical inspection of these places was carried out as usual by the District Sanitary Inspectors, and 104 recorded inspections have been made during the year. Minor defects which were observed were remedied on the attention of the management being called thereto. A number of visits were made during the year in regard to the exclusion of children from cinemas owing to the prevalence of zymotic disease, but no breaches of the law were observed.

G. Other Sanitary Work.

SMOKE ABATEMENT.

During the year the number of observations (each of half-hour duration or longer) made by the Smoke Inspector for the emission of smoke, etc., was 1,085, and 152 inspections were made of the boiler plants concerned.

Sixty-eight chimneys were found to be discharging black smoke for more than a total of three minutes in the half hour. Forty-nine firms were notified in writing immediately following the observation and notices to abate the nuisance were served in each case. The average discharge of black smoke in these cases was 7.2 minutes in thirty.

The causes of smoke were carefully investigated in the 49 cases subject to preliminary notices and are summarised as follows :—

Spread firing (sudden cooling)	22
Inattention to coal feed (machine stokers)	9
Insufficient draught plant	3
Defective furnaces	2
Fireman engaged on other duties	1
Undue restriction of draught	—
Insufficient boilers at work	2
Excessive dragging of fires	10

It will be seen that only in 5 cases was the plant itself at fault, the nuisance in the 44 other cases arising from the manner in which it was used.

Court proceedings were instituted in three cases with the results as shown :—

SUMMARY OF PROSECUTIONS TAKEN UNDER THE PUBLIC HEALTH
(SMOKE ABATEMENT) ACT, 1926.

Black smoke dis- charged mins. in 30.	Particulars of Boiler Plant	Method of stoking	Causation of smoke	Penalties and Costs
6	Two Lancashire Boilers...	Machine	Undue draught restrictions	£ s. d. 7 0
7½	One Lancashire Boilers...	Hand ...	Heavy firing	3 0 0
17	Two Lancashire Boilers	Hand & Machine	Defective furnaces	7 0
			Total ...	£3 14 0

The results of these proceedings cannot be considered entirely satisfactory.

The City Analyst has examined monthly throughout the year the contents of two atmospheric deposit gauges situated in :—

- (1) A northern residential district, two miles from the centre of the City;
- (2) the centre of the City;

being respectively known as North and Central, and the following is a summarisation of the City Analyst's Report :—

TONS PER SQUARE MILE.

Station	Period	Total Solids	Tar	Carbon	Ash	Sulphuric Acid	Chlorine	Ammonia
North ...	January ...	9.84	0.54	6.14	3.06	0.69	1.21	0.11
Central ...	January ...	18.55	1.29	8.13	9.12	3.93	2.58	0.52
North ...	February ...	12.62	1.43	4.31	6.88	3.07	1.82	0.39
Central ...	February ...	76.90	3.28	43.24	30.28	3.72	3.95	0.84
North ...	March ...	9.20	0.43	3.64	5.13	0.52	0.78	0.21
Central ...	March ...	26.23	1.82	9.78	14.63	3.24	0.73	0.45
North ...	April ...	19.62	0.36	6.38	12.88	2.62	1.18	0.18
Central ...	April ...	37.90	0.73	16.84	20.33	4.58	1.99	0.31
North ...	May ...	10.84	0.78	5.49	4.56	1.61	1.36	0.18
Central ...	May ...	51.20	0.17	35.31	14.14	3.63	1.54	0.21
North ...	June ...	11.45	0.50	4.97	5.89	1.17	0.89	0.14
Central ...	June ...	12.57	0.42	7.79	4.36	2.04	1.22	0.14
North ...	July ...	9.92	0.18	3.61	6.11	0.87	2.28	0.36
Central ...	July ...	13.66	0.21	7.89	5.55	4.53	2.62	0.38
North ...	August ...	6.28	0.36	3.27	2.64	0.70	0.61	0.00
Central ...	August ...	22.42	0.62	10.31	11.49	1.71	0.73	0.49
North ...	September ...	9.24	0.54	2.43	6.27	1.53	1.68	0.04
Central ...	September ...	21.73	0.70	11.11	9.92	2.35	1.82	0.14
North ...	October ...	8.59	0.71	4.78	3.10	2.19	2.42	0.25
Central ...	October ...	36.85	1.05	14.01	21.79	4.10	3.11	0.49
North ...	November ...	5.14	0.07	2.11	2.96	0.87	0.64	0.07
Central ...	November ...	23.26	0.70	13.20	9.36	4.66	4.40	0.56
North ...	December ...	5.60	0.18	2.18	3.24	1.00	0.99	0.11
Central ...	December ...	34.13	1.05	16.03	17.05	3.39	2.41	0.52
North ...	...	118.34	6.08	49.31	62.72	16.84	15.86	2.04
Central ...	...	375.40	12.04	193.64	168.02	41.88	27.10	5.05
Total (North and Central)		493.74	18.12	242.95	230.74	58.72	42.96	7.09
Means ...	...	246.87	9.06	121.47	115.37	29.36	21.48	3.54

III.—FOOD.

Report by W. HALSTEAD, M.R.C.V.S., D.V.S.M. (Vict.),
Veterinary Inspector.

(A) MILK SUPPLY.

There is an average dairy cow population in Bradford of 3,872 animals, housed in 281 dairy farms. The amount of milk produced by these cows is estimated at 7,596 gallons per day, whilst about 7,000 gallons come into the city by train or road; the total amount of milk consumed in the city being about 14,596 gallons daily, representing 0·39 pint per head of the population for all purposes.

The dairy herds were regularly inspected during the year, 510 visits being made to the dairy farms in the city. Sixteen cases of Tuberculosis were observed amongst the cattle, 12 of which were affected with Tuberculosis of the Udder. These 12 cows were members of 12 herds, with a total daily milk production of 540 gallons. The remaining 4 animals were affected with Tuberculosis in various other forms. The number of samples taken in connection with veterinary inspection for bacteriological examination was 207, of which 138 were for biological tests.

Tuberculosis Order, 1925. The above-mentioned 16 animals were slaughtered under the provisions of this Order; on post-mortem examination 6 showed the disease as not advanced; whilst in the remaining 10 the lesions were those of advanced Tuberculosis. The amount of compensation paid to the owners was £105 15s., and the net salvage received for the disposal of the carcasses, etc., was £48 16s. 3d.

Contagious Abortion. During the routine inspection of dairy cows, definite clinical evidence of contagious abortion was noted in 3 herds. The estimated quantity of milk produced on these farms was 87 gallons daily. No cases of Undulant Fever attributable to the consumption of milk from these herds were reported.

Milk and Dairies Consolidation Act, 1915.

Biological Examination of Milk for Tuberculosis. Five hundred and thirty samples were taken; these samples were unselected and 23 of them were reported positive for B. Tuberculosis, or 4·3 per cent. of the milk was infected.

The Milk (Special Designations) Order, 1923. There is one herd in the city producing under this Order about 120 gallons of Certified Milk per day, also one herd producing about 60 gallons of Grade A (Tuberculin Tested) Milk per day, and 11 herds producing 930 gallons of Grade A Milk per day.

A licence to pasteurise milk was granted to one firm in the city and under this licence about 400 gallons of milk is pasteurised.

During the year the licence granted to one producer was revoked because of his non-compliance with the requirements of the above Order.

SUMMARY.

Number of city dairy farms	...	...	...	...	...	281
Average dairy cow population	...	...	...	...	...	3,872
Number of visits to city farms	...	...	...	...	...	492

Cows affected with :—

(1) Tuberculosis of the Udder :

Slaughtered (a) not Advanced	...	...	...	5	
(b) Advanced	...	...	...	7	
				—	12

(2) Clinical Tuberculosis (other forms) :

Slaughtered (a) Not Advanced	...	...	...	1	
(b) Advanced	...	...	...	3	
				—	4

Total samples submitted for Bacteriological and

Biological Examination	668
------------------------	-----	-----	-----	-----	-----	-----

Tuberculosis Order, 1925.

Compensation paid to owners	...	...	£105 15 0
Net Salvage received for carcasses	...	...	£48 16 3

Milk and Dairies Order, 1926. There are 491 cowsheds within the city, and much improvement has been effected within recent years in their structure and equipment, and farmers now realise that the production of a consistently clean milk is, with care and method, comparatively

easy. The improvement in cowsheds carried out are shown in the following summary :—

SUMMARY OF DEFECTS REMEDIED.

	1930	1931	1932	1933
Floors	79	18	13	10
Light and ventilation ...	55	16	5	4
Water supply	—	—	—	—
Drainage	14	2	3	2
Manure pits	3	4	—	1
Milk-rooms provided ...	62	33	19	5
Milk-rooms altered ...	19	2	3	10
General repairs	18	4	13	2
Rooms added for sterilization purposes	6	4	5	1
Cowshed roofs repaired ...	—	—	—	5
Cowshed walls cement rendered	—	—	—	4
Cowsheds reconstructed ...	—	—	—	4

Total number of visits to farms was 865.

There were at the end of the year 356 vendors of milk registered and residing within the city. These may be classified as follows :—

Cowkeepers and retailers	152
Retailers only (in street or from their homes) ... }	
Milkshops (including dairies, confectioners, small grocers and other shops)	204
Shops where milk is sold in sealed bottles only	704

The number of visits made to these premises was 1,107, and generally the premises were found to be in a satisfactory state. During the year 11 milk purveyors provided new dairies for themselves, and 4 others made material improvements in their existing arrangements.

In addition to these 356 vendors residing within the city, 75 dairy-men came into the city from surrounding districts to sell milk by retail.

The milk supply produced within the city is supplemented from 325 sources outside the boundary. From these sources the milk arrives in Bradford in 44 cases by rail and 281 by road.

During the year 31 new milk purveyors were registered, in addition to 45 shopkeepers who were registered to sell milk in sealed bottles only.

Ten persons have been granted a dealer's licence to sell Certified Milk, 46 to sell Grade "A" Milk, and 4 to sell Pasteurised Milk.

Proceedings were instituted in one case for an infringement of the Milk and Dairies Acts and Order. Penalties amounting to £2 4s. were imposed.

Chemical Examination of Milk. Nine hundred and forty samples were analysed, and the results are shown in tabulated form on page 35. These show that 4.04% of the samples gave an analysis under 3.0% of fat, and 61.48% over 3.5% of fat; while 0.85% of these samples gave an analysis under 8.5% of non-fatty solids. The total either below 3.0% of fat or 8.5% of non-fatty solids was 46, or 4.89% of the samples. In addition 2 samples of skimmed milk were analysed.

Bacteriological Examination of Milk. Reference to the Report of the City Bacteriologist will give the number of the samples examined and further details.

There were 832 samples of milk submitted for bacterial counts. Of these samples 407 were obtained from sources outside the city and 425 from inside. In 385 samples, or 46.27%, B. Coli was absent in 1 c.c.; in 136 samples, or 16.35%, B. Coli was absent in 0.1 c.c.; in 147 samples, or 17.65%, B. Coli was absent in 0.01 c.c.; in 72 samples, or 8.65%, B. Coli was absent in 0.001 c.c.; and in 92 samples, or 11.05%, B. Coli was present in 0.001 c.c.

RETAIL DISTRIBUTION OF MILK.

In recent years marked improvement is evident in the conditions under which milk is produced on the majority of farms. There has not, however, been in Bradford quite the same degree of improvement in the methods of retail distribution.

Milk is distributed by retail either as (a) loose milk, or (b) in a container.

The distribution of loose milk on account of the excessive exposure, not only during delivery but subsequently in the household, cannot be justified on hygienic grounds.

To the distribution of milk in a container there are also serious objections, namely, the conditions under which containers are filled and, in the case of the container of returnable type, whether the facilities for cleansing and sterilising these containers are adequate.

Though the housewife at present views such an innovation with a certain doubt, it is by the use of a satisfactory non-returnable milk container that hygienic progress in the retail distribution of milk will be made.

MILK DISTRIBUTION—MATERNITY AND CHILD WELFARE.

Fifty-two thousand six hundred and thirteen gallons of Grade "A" milk produced on farms within the city were distributed as follows:—

				Gallons
Maternity and Child Welfare ...	...	...	...	47,755
Tuberculosis Dispensary ...	...	...	...	4,858
				<hr/>
Total				52,613
				<hr/>

**(B) THE FOOD AND DRUGS ADULTERATION ACT 1928, AND
THE PUBLIC HEALTH (PRESERVATIVES ETC. IN FOOD)
REGULATIONS.**

The number of samples of food and drugs taken under these Acts and submitted to the Public Analyst for analysis by the sampling officer was 1,362. Of these 1,294 were certified as genuine, and 68 as adulterated or doubtful. In 4 adulteration cases proceedings were taken against the vendors. The total penalties and costs amounted to £10 19s. 0d.

The adulterations in the remaining cases were small, and the vendors were cautioned by letter.

The Public Health (Dried Milk) Regulations, 1923 and 1927. When any dried milk is sold for human consumption, the receptacle in which it is contained has to be labelled in accordance with the requirements of the above Regulations.

In two cases proceedings were taken for non-compliance with the Regulations. Both cases were dismissed under the Probation of Offenders Act, 1927, on payment of costs.

RESULTS OF MILK ANALYSIS, 1933.

Non-Fatty Solids		Fat																							
Per cent.	Under 2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6 & over	Total	Per Cent
Under 7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Under 7.5
7.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.5
7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.6
7.7	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	7.7
7.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.8
7.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.9
8.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	8.0
8.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	8.1
8.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.2
8.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.3
8.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.4
8.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5
8.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.6
8.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.7
8.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.8
8.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.9
9.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.0
9.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.1
9.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.2
9.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.3
9.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.4
9.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5
9.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.6
9.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.7
9.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.8
9.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.9
10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0
Totals ...	—	4	6	17	11	60	50	60	82	72	89	94	75	63	58	47	23	27	28	24	12	38	940		

TABLE SHOWING NUMBER OF SAMPLES PROCURED AND EXAMINED
DURING 1933.

Nature of Sample	Number Sub- mitted	Statutory Sample		Informal Sample	
		Genuine	Adult- erated	Genuine	Adult- erated
Bacon	1	—	—	1	—
Baking Powder	6	—	—	6	—
Beef Suet	3	—	—	3	—
Beer	3	3	—	—	—
Butter	49	—	—	49	—
Candied Peel	1	—	—	1	—
Cheese	9	—	—	9	—
Cocoa	3	—	—	3	—
Coffee	9	—	—	9	—
Coffee and Chicory (Liquid)	2	—	—	2	—
Corn Flour	1	—	—	1	—
Cream	11	3	1	7	—
Cream (Tinned)	8	—	—	7	1
Cream (Vita)	1	—	—	1	—
Custard Powder	1	—	—	1	—
Dried Fruit	11	—	—	11	—
Dried Mint	3	—	—	3	—
Dripping	2	—	—	2	—
Egg Powder Substitute	1	—	—	1	—
Egg Wine	1	—	—	1	—
Fish Paste	5	—	—	5	—
Fish (Potted)	2	—	—	2	—
Fish (Tinned)	1	—	—	1	—
Flavouring Essence	1	—	—	1	—
Fruit Crush	3	1	—	2	—
Ginger Beer Tablets	1	—	—	1	—
Ginger Preserved... ..	1	—	—	1	—
Ginger Wine	2	—	—	2	—
Ginger Wine Essence	1	—	—	1	—
Golden Syrup	1	—	—	1	—
Ground Almonds	5	—	—	5	—
Ground Rice	2	—	—	2	—
Honey	5	—	—	5	—
Honey (Prepared)	1	—	—	1	—
Ice Cream	4	—	1	2	1
Jam	23	—	1	21	1
Jelly	1	—	—	1	—
Lard	10	—	—	10	—
Lemon Cheese	2	—	—	2	—
Lemon Curd	2	—	—	2	—
Lemon Crystals	1	—	—	1	—
Lemon Squash	1	—	—	1	—
Malt Vinegar	1	—	—	1	—
Marmalade	4	—	—	4	—
Margarine... ..	15	—	—	15	—
Meat Paste	2	1	—	1	—
Meat (Potted)	11	1	1	6	3
Meat (Tinned)	1	—	—	1	—
Milk	942	733	39	163	7
Milk (Tinned)	10	—	—	10	—
Milk Dried	3	—	—	—	1
Mincemeat	2	—	2	2	—
Mustard	2	—	—	2	—
Oatmeal	1	—	—	1	—
Pearl Barley	1	—	—	1	—
Pepper	2	—	—	2	—
Pickles	2	—	—	2	—
Rice	2	—	—	2	—
Salt	1	—	—	1	—
Totals (carried forward)...	1,203	742	45	402	14

TABLE SHOWING NUMBER OF SAMPLES PROCURED AND EXAMINED
DURING 1933.

Nature of Sample	Number Sub- mitted	Statutory Sample		Informal Sample	
		Genuine	Adult- erated	Genuine	Adult- erated
Totals (brought forward) ...	1,203	772	45	402	14
Salt (Iodised)	2	1	—	1	—
Sauce	7	—	—	7	—
Sausage	22	—	1	20	1
Self Raising Flour	5	—	—	5	—
Semolina	1	—	—	1	—
Soup Powder	1	—	—	1	—
Soup (Tinned)	1	—	—	1	—
Sweets	6	—	—	6	—
Tapioca	1	—	—	1	—
Tea	7	—	—	7	—
Tinned Vegetables	4	—	—	4	—
Tinned Fruit	5	—	—	5	—
Tripe	4	1	—	2	1
Vinegar	1	—	—	1	—
Whisky	4	—	—	4	—
Yeast	2	—	—	2	—
Alum	2	—	—	2	—
Ammoniated Tincture of Quinine	5	1	—	3	1
Aspirin Tablets	3	—	—	3	—
Bicarbonate of Soda	3	—	—	3	—
Bismuth Lozenges	1	—	—	1	—
Bismuth and Magnesia	2	—	—	2	—
Borax	2	—	—	2	—
Boric Acid Powder	3	—	—	3	—
Boric Ointment	5	—	—	3	1
Camphorated Oil	3	—	—	3	—
Castor Oil... ..	3	—	1	3	—
Chemical Food Pastilles	1	—	—	1	—
Cinnamon and Quinine	1	—	—	1	—
Cod Liver Oil	2	—	—	2	—
Epsom Salts	1	—	—	1	—
Glauber Salts	2	—	—	2	—
Glycerine	4	—	—	4	—
Gregory Powder	1	—	—	1	—
Ground Ginger	3	—	—	3	—
Health Salts	1	—	—	1	—
Iodine	5	—	—	3	2
Lemon Juice, Glycerine, & Honey	1	—	—	1	—
Maclean's Stomach Powder	1	—	—	1	—
Malt and Cod Liver Oil	1	—	—	1	—
Mercuric Ointment	1	—	—	1	—
Olive Oil	5	—	—	5	—
Paregoric	2	—	—	2	—
Parish's Chemical Food... ..	2	1	—	1	—
Raspberry Vinegar	1	—	—	1	—
Sol Volatile	2	—	—	2	—
Seidlitz Powders	1	—	—	1	—
Soap Liniment	1	—	—	1	—
Sulphur (Flowers of)	2	—	—	2	—
Sweet Spirit of Nitre	3	1	—	1	1
Syrup of Figs	1	—	—	1	—
Tartaric Acid	7	—	—	7	—
Zinc Ointment	1	—	—	1	1
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
Totals	1,362	747	47	546	22

(C) SLAUGHTERHOUSES AND MEAT INSPECTION.

The number of private slaughterhouses within the city is 34 and 1 knacker's yard. Nine of these, and also the knacker's yard, are subject to annual licence, and 25 are registered slaughterhouses. The number of visits made to private slaughterhouses was 2,013, and to butchers' shops and potted meat and sausage-makers' premises 2,293. There were no seizures of diseased or unsound meat during the year.

The total number of animals slaughtered in Bradford was as follows :—

				Public Abattoir	Private Slaughterhouses.
Beasts	...	...	...	15,289	6,347
Sheep and Lambs	...	...	...	55,597	24,538
Calves	...	...	...	6,053	287
Pigs	...	...	...	29,204	7,592
				<hr/> 106,143	<hr/> 38,764
Total	...	...	...		144,907

The number of carcasses and offals totally condemned were as follows :—

WHOLE CARCASSES AND OFFAL CONDEMNED, 1933.

	Bulls	Cows	Bullocks	Heifers	Calves	Sheep	Pigs
Decomposition (general)	—	2	—	—	5	43	18
Dropsy (general) ...	—	—	—	—	—	32	7
Emaciation (general pathological) ...	—	6	—	—	4	63	11
Erysipelas (acute swine)	—	—	—	—	—	—	9
Fever (acute) ...	—	6	—	1	4	5	17
Immaturity ...	—	—	—	—	3	—	—
Jaundice ...	—	—	—	—	—	—	15
Parasitic Conditions ...	—	—	—	—	—	—	—
Pyæmia ...	1	5	1	—	12	6	3
Septicæmia ...	—	3	—	—	—	—	1
Tuberculosis ...	2	94	1	9	3	—	63
Miscellaneous ...	—	2	—	—	1	1	7
TOTALS ...	3	118	2	10	32	150	151

The condemnations of partial carcasses and organs are shown in the following table :—

PARTIAL CARCASSES AND ORGANS CONDEMNED, 1933.

		Partial Carcase	Lungs	Heart	Stomach and Intestine	Liver	Kidney	Udder	Head
Abscess	Beasts	1	11	1	—	12	—	—	2
	Sheep	—	3	—	—	2	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	1	3	—	—	4	—	—	2
Fibro- sis	Beasts	—	10	—	—	37	—	—	—
	Sheep	—	—	—	—	10	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	—	7	—	—	72	—	—	—
Inflam- matory Condi- tions	Beasts	—	22	4	3	4	5	9	1
	Sheep	—	2	—	—	2	—	—	—
	Calves	—	1	—	—	1	—	—	—
	Pigs	—	50	20	1	13	3	—	—
Parasi- tic Condi- tions	Beasts	—	5	—	3	4	—	—	1
	Sheep	—	18	—	—	275	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	—	11	—	—	32	—	—	—
Tuber- culosis	Beasts	2	483	26	27	101	12	12	82
	Sheep	—	—	—	—	—	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	—	386	155	172	394	3	—	606
Miscel- laneous	Beasts	7	2	—	—	2	2	1	2
	Sheep	4	—	—	—	—	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	1	—	—	—	—	—	—	—

The incidence of tuberculosis in beasts and pigs is shown in the following table :—

	Beasts		Pigs	
	No.	Per- centage	No.	Per- centage
Generalised Tuberculosis	110	0.39	63	0.17
Localised Tuberculosis	483	1.72	606	1.64
Totals	593	2.11	669	1.81

The total weight of meat in lbs. found to be unsound or unwholesome was as follows :—Beef, 69,847; Mutton, 10,353; Pork, 24,892; Veal, 1,824; Offal, 27,785; a total of 134,691 lbs., or upwards of 60 tons. In addition to which the following miscellaneous foodstuffs were destroyed :—

Chilled and Frozen Meat, 272 lbs. ; Ox Kidneys, 117 lbs. ; Hams, 65 lbs. ; Imported Livers, 78 lbs. ; Bacon, 25 lbs.

The Slaughter of Animals Act, 1933. This Act, which came into operation on the 1st January, 1934, confers new powers on local authorities in respect to the methods of slaughtering animals in slaughterhouses and knackers' yards and as to the issue of licences to fit and proper persons to act as slaughtermen.

The prevention of cruelty in slaughterhouses and knackers' yards was previously regulated by bye-laws, but this new Act makes the stunning of cattle and pigs compulsory by means of a mechanically-operated instrument. Sheep are excluded from this requirement unless the local authority, by resolution, determine that sheep shall be so stunned.

The use of electricity for the stunning of pigs has been so satisfactory that in view of the possible improvements that would make this method equally suitable for the stunning of sheep it was decided not to make the stunning of sheep compulsory until the electrical method of stunning was satisfactory when applied to this particular animal.

It was decided that the licences granted to persons to act as slaughtermen should be for the period ending 31st December of each year, and the fee of 1/- be charged in respect to each licence, and a similar fee for the renewal of such licence.

Three hundred and twenty-six licences have been granted to persons to act as slaughtermen.

(D) OTHER ARTICLES OF FOOD,

Supplies of Fish, Fruit and Vegetables, etc., have been inspected daily throughout the year in the St. James' Wholesale Market and the wholesale fish warehouses in the vicinity of the market. Sixty-seven visits and inspections of fish-curing premises have also been made during the year.

The following foods were found by the Inspector to be diseased, unsound, or unwholesome, and were destroyed after surrender by the owners :—

					Tons.	Cwts.	Qrs.	Lbs.
Cabbage	...	...	...	...	7	9	1	1
Cauliflowers	...	...	...	...	4	3	1	1
Sprouts	...	...	...	...	7	1	1	8
Spinach	...	...	...	...		5	2	14
Lettuce	...	...	...	...	2	0	3	5
Legumes	...	...	...	...	6	5	2	13
Potatoes	...	...	...	...	7	15	0	0
Onions	...	...	...	...		13	3	2
Carrots	...	...	...	...	7	19	3	24
Turnips	...	...	...	...		2	0	0
Beetroot	...	...	...	...	1	6	0	14
Radishes	...	...	...	...		11	2	22
Celery	...	...	...	...			2	24
Leeks	...	...	...	...		16	3	2
Parsley	...	...	...	...			1	0
Watercress	...	...	...	...		3	0	7
Tomatoes	...	...	...	...		18	3	6
Mushrooms	...	...	...	...				24
Hard Fruits	...	...	...	...	2	8	1	2
Soft Fruits	...	...	...	...	2	17	1	10
Stoned Fruits	...	...	...	...		9	2	8
Nuts	...	...	...	...		11	2	0
Wet Fish	...	...	...	...	1	1	3	7
Dried Fish	...	...	...	...		13	3	14
Shell Fish	...	...	...	...	3	14	2	9
Rabbits	...	...	...	...		16	3	23
Game and Poultry	...	...	...	...		1	3	9
Tinned Meats, Fish, Fruit, etc.	...	...	...	...			3	8
Duck Eggs	...	...	...	...		1	3	21
Total					60	12	2	26

This is 20 tons weight less than in the previous year and is accounted for by a large decrease in potatoes and carrots.

Shell-Fish. Ninety-two samples of shell-fish were submitted for bacteriological examination. The sources of these samples and the results are given in the table :—

Nature of Sample	Source of Supply	Results		
		Clean	Doubtful	Bad
Mussels	Boston	9	3	4
"	Dalbeattie	6	—	6
"	Dumfries	—	1	—
"	Ravensglass	4	—	—
"	Baycliffe	—	—	2
"	King's Lynn	4	1	—
"	O'Meath,	7	2	1
"	Park Gate	1	—	2
"	Mostyn	2	—	—
"	Conway	1	—	—
"	Killorglin	6	1	—
"	Bagilt	—	1	—
Cockles	Baycliffe	1	1	—
"	Hest Bank	1	—	—
"	Silverdale	5	1	—
"	Isle of Barra	4	—	—
"	Ulverston	2	—	—
"	Lytham	—	—	2
"	Flookburgh	6	—	—
"	Cark	2	—	—
Oysters	American Blue Point	1	—	—
"	Whitstable Natives	2	—	—
	Totals	64	11	17

The Sea Fishing Industry Act, 1933. This Act, *inter alia*, provides that no person shall in Great Britain sell, expose or offer for sale, or have in his possession for the purpose of sale any sea-fish less than a minimum size that may be prescribed by an Order made by the Minister of Agriculture and Fisheries and the Secretary of State for Scotland for certain species of sea-fish.

The Sea Fishing Industry (Immature Sea-Fish) Order, 1933. This Order came into operation on 1st August, 1933, and provides that no person shall sell, expose or offer for sale, or have in his possession for

the purpose of sale any of the following sea-fish of less than the following measurements :—

						Length
Hake	...	...	...	...	...	13 inches
Haddock	...	...	...	...	...	9½ „
Plaice	...	...	...	...	...	9 „
Dabs	...	...	...	...	...	9 „
Soles	...	...	...	...	...	9 „

From the short experience in the working of this Act it would appear that an amendment as regards executive duties under Section 4 (3) is necessary.

Watercress and Lettuce. Watercress has become increasingly popular during recent years, and large supplies pass through the wholesale market during a prolonged period. Modern methods of cultivation provide a consistently clean cress as is indicated by the result of the bacteriological examination of 62 samples submitted and set out in the table below :—

WATERCRESS.

	B. Coli.	B. Welchi.
Absent from 1 gm.	13	51
Present in 1 gm. and absent from 0·1 gm....	23	8
Present in 0·1 gm. and absent from 0·01 gm....	21	2
Present in 0·01 gm. and absent from 0·001 gm. ...	3	—
Present in 0·001 gm. and absent from 0·0001 gm. ...	1	—
Present in 0·0001 gm.	1	—

Note.—One unsatisfactory sample was submitted for examination previous to offering for sale, and in consequence of the result no watercress from this source was marketed.

One sample of lettuce was examined and found to be clean and free from organisms of the enteric group.

ABSTRACT OF THE RESULTS OF THE BACTERIOLOGICAL EXAMINATION OF ICE CREAM.

Coliform Bacilli	Num- ber of Sam- ples	Colonies on Agar at 37° C. per 1 cc.						
		under 50,000	under 100,000	under 200,000	under 500,000	under 1,000,000	under 2,000,000	over 2,000,000
Absent in 1 cc. ...	70	49	4	3	2	3	3	6
Present in 1 cc. and absent in 0.1 cc. ...	14	8	2	—	3	—	1	—
Present in 0.1 cc. and absent in 0.01 cc. ...	14	10	1	—	1	2	—	—
Present in 0.01 cc. and absent in 0.001 cc.	13	4	3	2	1	—	1	2
Present in 0.001 cc. and absent in 0.0001 cc.	13	4	1	1	1	1	2	3
Present in 0.0001 cc.	19	—	1	1	3	3	4	7
Totals	143	75	12	7	11	9	11	18

Fish Friers' Premises. At the end of the year there were 301 fish friers' businesses within the city. Thirty-nine of these are not subject to the consent of the Corporation.

During the year five new businesses were established and one business was discontinued voluntarily.

(E) BAKEHOUSES, Etc.

The number of Bakehouses in use at the end of the year was 518, of which 306 were Workshop Bakehouses, 9 of these being underground, and 182 Factory Bakehouses, 21 being underground.

Of the Factory Bakehouses 9 may be termed large wholesale bakers. The number of inspections made of Bakehouses was 1,428.

Limewashing and Painting of Bakehouses (Sec. 99).

Occupiers requested to limewash walls and ceilings ...	127	
Occupiers requested to cleanse walls and ceilings ...	10	
Occupiers requested to paint walls and ceilings ...	7	
		— 144
New sinks provided	12	
Fume pipes to ovens provided or repaired	2	
Defective plaster repaired or renewed	15	
Bakehouse floors repaired or renewed	11	
Miscellaneous defects	34	
		— 74

Restaurant and Café Kitchens.

No. in use at the end of the year	136	
No. of inspections made of Restaurants, etc. ...	265	
Limewashing or cleansing of walls and ceilings ...	10	
Painting and papering of walls and ceilings ...	6	
New sinks provided and fixed	3	
Defective plaster repaired or renewed	3	
Miscellaneous defects	7	
		— 29

Food Stores.

Inspection of shops used as Food Stores ...	127	
Limewashing or papering of walls and ceilings ...	16	
Food stores used as sleeping places	2	
Floors cleansed or repaired	11	
Shop fittings cleansed	4	
Miscellaneous defects	33	
		— 66

Fertilizers and Feeding Stuffs Act, 1926.

Feeding Stuffs sampled				Fertilizers sampled			
India Meal	...	...	2	Barley Meal	...	...	1
Dried Beet Pulp	...	...	1	Nitrate	...	...	1
Soya Meal	...	...	2	Lawn Dressing	...	...	2
Dairy Meal	...	...	6	Plant Food...	...	...	1
Iodized Digestive Powder	...	...	1	All Blood Fertilizer	...	...	1
Bone Meal	...	...	2	Basic Slag	...	...	1
Chicken Foods	...	...	6	Bone Meal	...	...	1
Meat and Bone Meal	...	...	1	Sulphate of Ammonia	...	...	1
Grass Kobs (Cattle Food)	...	...	1	Super Phosphate of Lime	...	...	1
Maize Meal	...	...	2	Blood and Bone Manure	...	...	1
Bran	...	...	1	All Round Fertilizer	...	...	2
Palm Kernel Meal	...	...	1	Carboniferous Lime	...	...	1
Linseed Oil Cake	...	...	1	Tomato Fertilizer	...	...	1
Pig Meal	...	...	1	Hop Manure	...	...	1

The results of the analysis of the above samples showed that the constituents conformed with the particulars as set out in the Statutory Statement and were in accordance with the provisions of the Act.

Merchandise Marks Act, 1926. Attention has been given during the year to the requirements of the various Imported Goods Orders made under the above Act and considerable improvement is noticeable in regard to the necessary marking by retailers. It is not generally recognised that the object of the Orders is to distinguish Empire or home produce from foreign produce, with the result that the marking of goods which are obviously not home produce is not considered important.

Prosecutions were undertaken during the year in five instances for non-compliance with the requirements of the Marketing Orders. Two of these were under the No. 3 Order (Imported Apples), and two were under the No. 4 Order (Tomatoes) and one under No. 5 Order relating to imported eggs. The offence in the latter case was the removal of marks of origin from foreign imported eggs, and a penalty of £5 was imposed. A conviction was recorded in each of the other four cases and penalties amounting in the aggregate to £2 8s. were imposed.

IV.—PREVALENCE AND CONTROL OF DISEASE.

(A) INFECTIOUS DISEASES.

The total deaths in Bradford from enteric fever, smallpox, measles, scarlet fever, whooping cough, diphtheria, and diarrhoea and enteritis under 2 years, known for convenience as Zymotic diseases, in 1933 was 93, giving a mortality rate for this group of 0·32 per 1,000.

AVERAGE QUINQUENNIAL ZYMOTIC DEATH-RATES FROM 1886.

1886-90 ...	2·3	1906-10 ...	1·3	1926-30 ...	0·46
1891-95 ...	2·3	1911-15 ...	1·2	1931 ...	0·24
1896-1900...	2·0	1916-20 ...	0·4	1932 ...	0·26
1901-1905...	1·7	1921-25 ...	0·5	1933 ...	0·32

The Zymotic death-rate for the first quarter was 0·30, for the second 0·43, for the third 0·20, and for the fourth 0·33.

The diseases to be notified in Bradford are smallpox, chicken pox, cholera, plague, diphtheria, membranous croup, erysipelas, scarlet fever, measles and German measles, whooping cough, ophthalmia neonatorum, infective enteritis, acute poliomyelitis, cerebro-spinal fever, tuberculosis, acute polio-encephalitis, encephalitis lethargica, pemphigus neonatorum, pneumonia and influenzal pneumonia, malaria, dysentery, and the fevers known by any of the following names, typhus, typhoid, enteric, relapsing, continued or puerperal.

Diphtheria. Cases, 380; Deaths, 15; Fatality, per cent., 4·2.

MORTALITY RATE PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	0·03	0·06	0·06	0·12	0·06	0·16	0·07	0·04	0·05	0·05
England and Wales	0·06	0·07	0·07	0·07	0·06	0·08	0·09	0·07	0·06	0·06

The number of cases of Diphtheria in 1933 was higher than that for 1932, but the fatality rate was rather lower. Fortunately the city remained comparatively free from that grave form of diphtheria which visited several neighbouring towns. The sickness rate per 1,000 was 1·29. The cases were fairly evenly distributed throughout the city, the greatest number occurring in the Listerhills Ward, where 39 cases were notified, and in the Great Horton, East Bowling and Manningham Wards, where 36, 32 and 29 cases occurred respectively.

CASES OF DIPHTHERIA MONTH BY MONTH.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of Cases...	36	17	33	27	17	24	36	24	33	37	42	54

The greatest incidence of the disease fell on children over three years of age, and the highest death-rate on those at six years.

CASES AND DEATHS ACCORDING TO AGE.

	Under 1 yr.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-15	15-20	Over 20	Total
Cases ...	11	16	19	32	25	23	37	31	33	23	63	22	45	380
Deaths .	1	1	2	1	—	—	4	—	2	1	1	—	2	15
Fatality per cent.	9·1	6·2	10·5	3·1	—	—	10·8	—	6·1	4·3	1·6	—	4·4	4·2

The number of cases removed to hospital was 338, or 96·8 per cent. of the cases.

Supplies of diphtheria anti-toxin for the use of practitioners in the city are kept at the Fever Hospital and at the Health Department. All patients admitted to the City Fever Hospital suffering from diphtheria receive a therapeutic dose of anti-toxin. The Schick test is not employed in the city.

Enteric Fever. Cases notified, 17; Deaths, 0; Fatality per cent., 0·0.

MORTALITY RATES PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·00	0·00
England and Wales	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01

The monthly incidence of the disease is shown as follows :—

CASES OF ENTERIC FEVER MONTH BY MONTH.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of Cases...	1	—	1	3	5	—	2	—	1	—	3	1

The sickness rate in Bradford was 0·06 per 1,000 of the population.

The number of cases removed to hospital was 11.

The weather conditions of 1933 were peculiarly favourable to the prevalence of Enteric Fever, but the low incidence of the disease in Bradford last year stands out in a marked favourable contrast with the experience of years when privy middens existed in large numbers in the city.

Scarlet Fever. Cases, 997; Deaths, 6; Fatality per cent., 0·60.

MORTALITY RATE PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	0·01	0·02	—	0·01	0·04	0·05	1·40	0·01	0·02	0·02
England and Wales	0·02	0·03	0·02	0·01	0·01	0·02	0·02	0·01	0·01	0·02

The number of cases of Scarlet Fever notified in 1933 was 216 more but the fatality rate was lower than in 1932. The sickness rate per 1,000 was 3·38. The greatest number of cases occurred in the Great Horton Ward where 99 cases were notified, and in North Bierley East, Bradford Moor and Manningham Wards, where 80, 68 and 68 cases occurred respectively.

CASES OF SCARLET FEVER MONTH BY MONTH.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of Cases...	87	59	51	77	66	59	85	52	87	103	101	170

The cases and deaths classified according to age are seen in the following Table :—

CASES AND DEATHS ACCORDING TO AGE.

	Under 1 year	1-5 years	5-15 years	15-25 years	25-45 years	45-65 years	Over 65 years	Total
Cases	17	294	551	75	54	6	—	997
Deaths	—	4	1	—	—	1	—	6
Fatality per cent. ...	—	1·4	0·2	—	—	16·6	—	0·6

The number of cases removed to hospital was 794, or 79·6 per cent. of the cases. The Dick test is not employed in the city.

Small-pox. No case of Small-pox occurred in the city in 1933.

The following Table gives the vaccination returns in Bradford since 1915.

VACCINATION STATISTICS.

Year	1 Births	2 Vaccinated	Insus- ceptible	4 Dead	5 Con. Objector	6 Post- poned	7 Removed	8 Un- accounted	Percent- age not Vaccinated including Columns 5, 6, 7, 8
1915	4,249	1,559	6	365	1,720	136	322	141	54.6
1916	4,028	1,337	6	355	1,767	103	278	182	57.7
1917	3,262	1,068	18	287	1,418	66	251	154	57.9
1918	3,221	885	7	288	1,367	92	310	272	63.4
1919	3,310	953	5	258	1,551	93	284	166	63.3
1920	5,208	1,363	9	370	2,609	109	444	304	66.6
1921	4,878	1,230	5	360	2,583	130	263	350	68.2
1922	4,415	1,231	6	277	2,413	91	231	166	65.7
1923	4,447	1,495	14	257	2,182	103	249	147	60.3
1924	4,172	1,336	14	274	1,855	129	376	188	61.1
1925	4,095	1,184	15	265	1,968	101	310	252	64.2
1926	3,892	1,325	32	271	1,727	76	244	108	55.9
1927	3,584	1,228	16	223	1,700	61	231	125	59.1
1928	3,707	1,147	12	208	1,930	32	243	135	63.1
*1929	4,495	1,119	35	233	2,599	67	240	202	69.1
1930	4,479	1,070	8	246	2,676	55	255	169	70.4
1931	4,168	947	19	240	2,510	46	266	140	71.1
1932	4,167	846	15	259	2,601	55	144	119	69.8

*The figures for that part of Bradford included in the old North Bierley Union are not available for those years prior to 1929.

Diarrhoea. Deaths, 41; Mortality per 1,000, 0.14.

The number of deaths from diarrhoea in 1933 was remarkably small taking into consideration the climatic conditions of the year.

DEATHS IN EACH WARD FROM DIARRHOEAL DISEASES IN 1933.

Ward	Certified as Infective			Not Certified as Infective			Total Deaths from Diarrhoeal Diseases		
	Under 2 yrs.	Others	Total	Under 2 yrs.	Others	Total	Under 2 yrs.	Others	Total
Allerton ...	—	—	—	3	—	3	3	—	3
Bolton ...	—	—	—	3	—	3	3	—	3
Bradford Moor	—	—	—	2	—	2	2	—	2
Clayton ...	—	—	—	—	—	—	—	—	—
East ...	—	—	—	3	—	3	3	—	3
East Bowling	—	—	—	3	—	3	3	—	3
Eccleshill ...	—	—	—	1	—	1	1	—	1
Exchange ...	—	—	—	1	—	1	1	—	1
Great Horton	—	—	—	—	—	—	—	—	—
Heaton ...	—	—	—	1	—	1	1	—	1
Idle ...	—	—	—	—	1	1	—	1	1
Listerhills ...	—	—	—	1	—	1	1	—	1
Little Horton	—	—	—	3	—	3	3	—	3
Manningham	—	—	—	3	1	4	3	1	4
North ...	1	—	1	2	2	4	3	2	5
North Bierley East...	—	—	—	1	—	1	1	—	1
North Bierley West ...	—	—	—	2	—	2	2	—	2
South ...	—	—	—	1	1	2	1	1	2
Thornton ...	—	—	—	—	—	—	—	—	—
Tong ...	—	—	—	—	—	—	—	—	—
West ...	—	—	—	2	—	2	2	—	2
West Bowling	—	—	—	1	2	3	1	2	3
City ...	1	—	1	33	7	40	34	7	41

Thirty-two, or 78·0 per cent. of the total deaths, occurred under one year of age.

DEATHS AT VARIOUS AGE PERIODS.

Age Periods...	Months			Total under One Year	Years						
	0-3	3-6	6-12	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65 and over
Deaths ...	10	10	12	32	2	—	1	1	—	2	3

DEATHS OCCURRING MONTH BY MONTH.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Number of Deaths ...	3	1	3	5	2	5	3	6	2	2	5	4	41

The number of notifications of cases of zymotic enteritis received in 1933 was 61.

Puerperal Fever and Puerperal Pyrexia. Cases, 61; Deaths, 8; Fatality per cent., 13·1.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Cases ...	20	22	27	74	77	103	75	99	67	61
Deaths ...	4	4	10	12	10	7	15	8	9	8
Fatality per cent.	20·0	18·2	37·0	16·2	13·0	6·8	20·0	8·1	13·4	13·1
Number of live births to each death ...	1252	1207	471	360	442	621	291	510	447	488

Measles and German Measles. Cases notified, 4,311; Deaths, 28; Mortality per 1,000, 0.10.

Whooping Cough. Cases notified, 697; Deaths, 10; Mortality per 1,000, 0.03.

Erysipelas. Cases, 171; Deaths, 10; Fatality per cent., 5.8.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Cases	159	136	142	152	175	179	157	141	130	171
Deaths	6	9	10	15	9	17	8	10	8	10
Fatality per cent.	3.8	6.6	7.0	9.8	5.2	9.5	5.1	7.1	6.2	5.8

Influenza. Deaths, 181; Mortality rate per 1,000, 0.61.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	159	96	43	152	48	268	34	124	106	181

Anthrax. Cases, 4; Deaths, 1; Fatality per cent., 25.0.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Cases	6	8	5	4	5	—	3	1	1	4
Deaths	2	—	—	—	1	—	1	—	—	1
Fatality per cent.	33.3	0.0	0.0	0.0	20.0	—	33.3	0.0	0.0	25.0

(B) TUBERCULOSIS.

The number of deaths from all forms of tuberculosis in 1933 was 261, giving a mortality rate of 0·88 per 1,000.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	311	284	292	292	288	292	265	281	277	261

MORTALITY RATE PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	1·05	0·98	1·01	1·00	1·00	1·01	0·89	0·93	0·93	0·88
England & Wales	1·06	1·04	0·96	0·97	0·93	0·96	0·90	0·90	0·84	—

During the past thirty years there has been a progressive reduction in the death-rate from all forms of tuberculosis; this is well seen in the following Table, which shows the average mortality rate per 1,000 for the five-yearly periods; 1901-1905 being 109 per cent. above that of last year.

AVERAGE MORTALITY RATE PER 1,000 FROM TUBERCULOSIS IN
BRADFORD FOR PERIODS OF FIVE YEARS FROM 1901.

Periods	1901-1905	1906-1910	1911-1915	1916-1920	1921-1925	1926-1930	1931	1932	1933
Pulmonary	1·31	1·19	1·19	1·16	0·84	0·81	0·79	0·75	0·75
Other Forms	0·53	0·46	0·34	0·30	0·21	0·17	0·14	0·18	0·13
All Forms	1·84	1·65	1·53	1·46	1·05	0·98	0·93	0·93	0·88

Public Health Act, 1925, Section 62. No action was taken under this section during the year.

NEW CASES AND MORTALITY DURING 1933.

Age Periods	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0 to 1	—	—	2	1	—	—	4	2
1 to 5	5	2	17	5	—	—	8	6
5 to 10	2	5	11	15	1	—	3	—
10 to 15	4	5	13	14	1	4	1	—
15 to 20	13	14	6	9	3	12	4	2
20 to 25	22	22	2	4	6	7	—	—
25 to 35	35	26	4	9	22	30	—	2
35 to 45	34	28	5	2	33	19	4	—
45 to 55	34	14	1	—	33	11	—	2
55 to 65	27	7	2	1	24	8	—	1
65 and upwards	6	—	—	1	5	3	—	—
Totals	182	123	63	61	128	94	24	15

Of the deaths occurring from all forms of tuberculosis in 1933 21 per cent. were not notified.

(A) *Pulmonary Tuberculosis*. Deaths, 222; Mortality rate per 1,000, 0·75.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	261	236	242	233	237	243	226	237	223	222

MORTALITY RATE PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	0·88	0·81	0·84	0·80	0·82	0·84	0·76	0·79	0·75	0·75
England & Wales	0·80	0·83	0·77	0·79	0·76	0·79	0·74	0·74	0·69	—

Considering the deaths in relation to sex the death-rate from pulmonary tuberculosis was in 1933 among males 0·94 per 1,000, and among females 0·59 per 1,000. The chart on page 58 shows the male and female death-rates from pulmonary tuberculosis for the past twenty-five years in Bradford and shows that the difference in the rates in the two sexes is maintained. The very low rate among females as compared with that among males is to some extent characteristic of Bradford figures, and is at the moment a phenomenon rather difficult to account for.

Of the deaths occurring in 1933, 16 per cent. were not notified. The notifications received numbered 340, of which 305 were notified for the first time. This is a decrease in primary notifications over the previous year.

(B) *Other Forms of Tuberculosis.* Deaths, 39; Mortality rate per 1,000, 0·13.

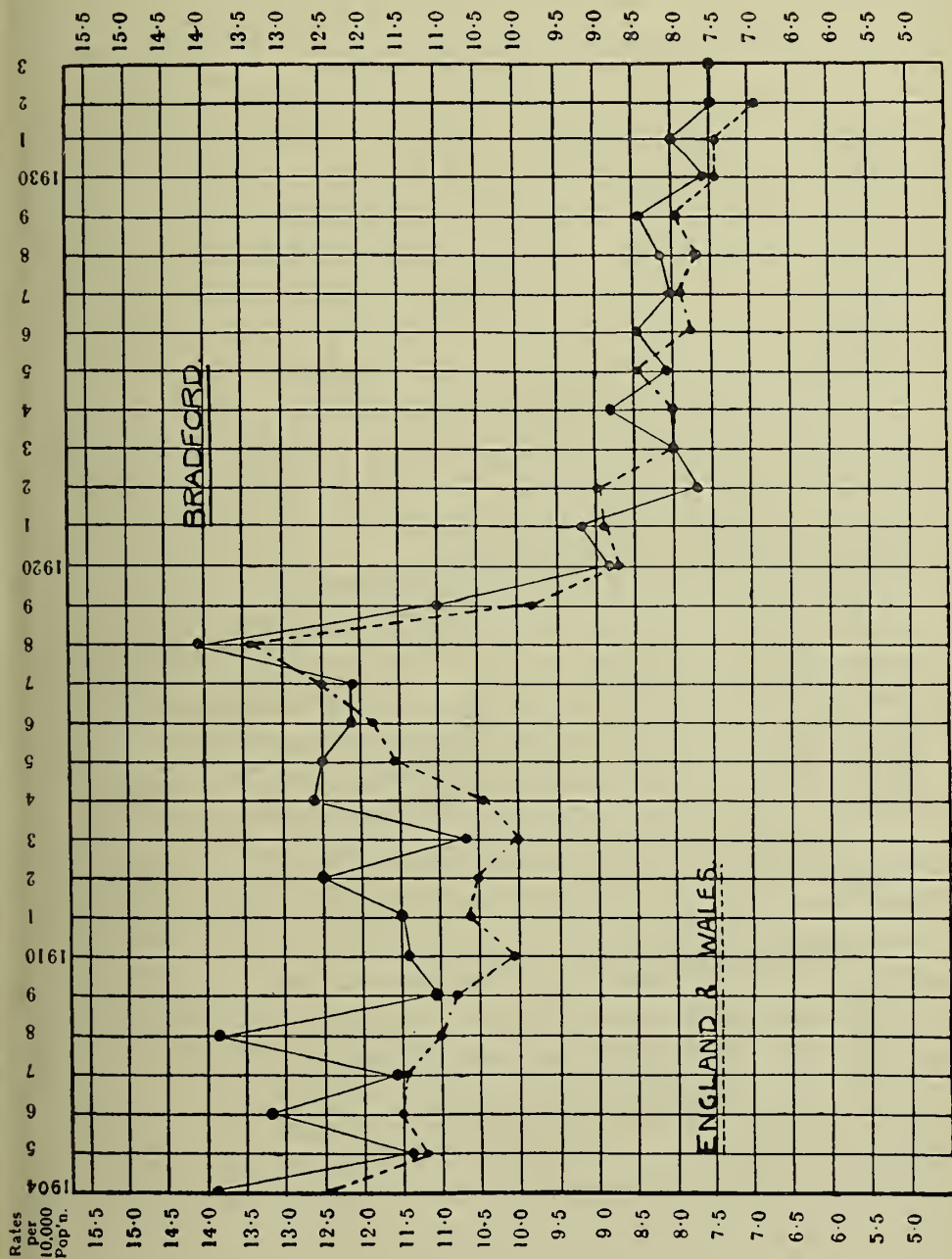
RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	50	48	50	59	51	49	39	44	54	39

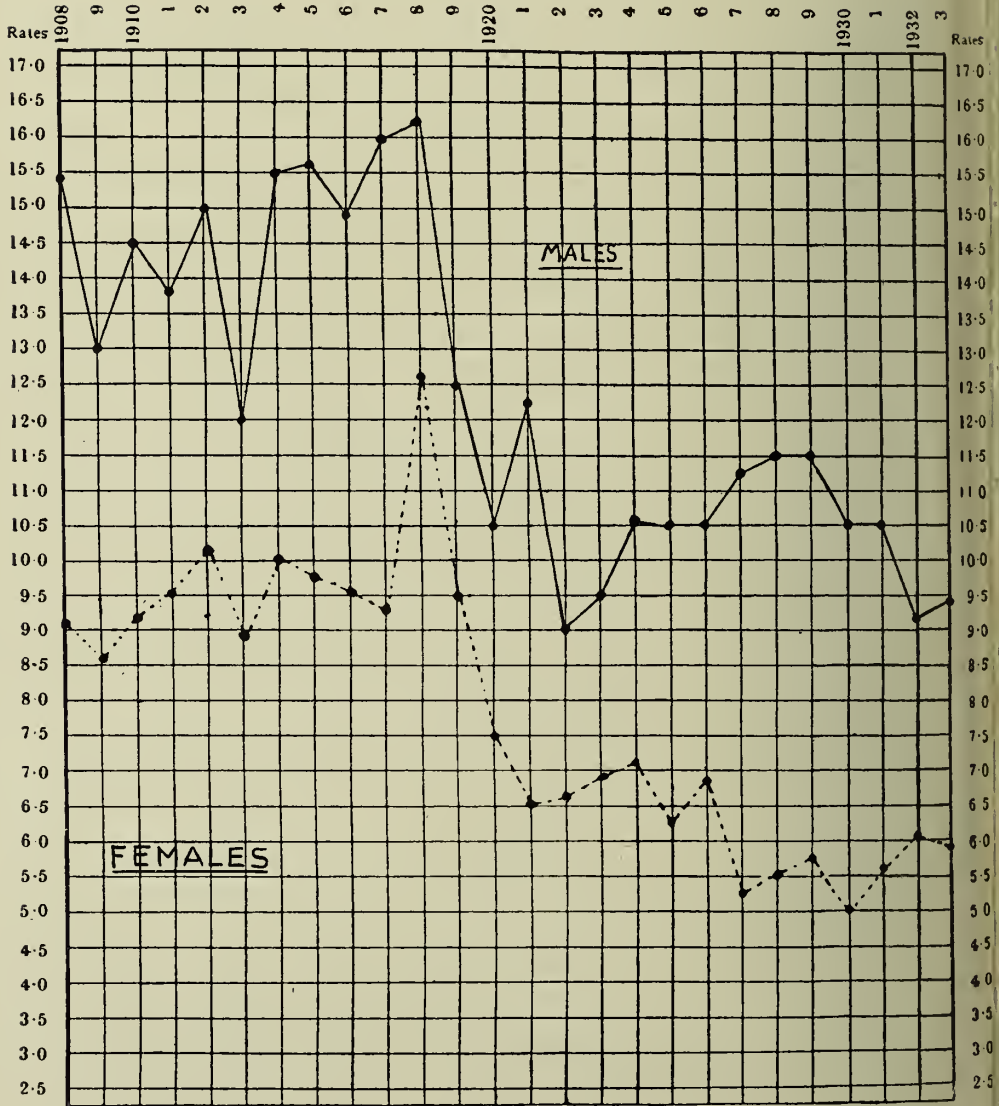
MORTALITY RATE PER 1,000 IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	0·17	0·17	0·17	0·20	0·18	0·17	0·13	0·14	0·18	0·13
England & Wales	0·22	0·21	0·19	0·18	0·17	0·17	0·16	0·15	0·15	—

During the past twenty years there has been a marked fall in the death-rate from non-pulmonary tuberculosis, the rate for last year being only 25 per cent. of that of the average for the years 1901-1905. The fall may be associated with several causes, all of which have, no doubt, had an effect in bringing about this result. These may be shortly stated as follows:—(a) The improvement in the nutrition in infancy and childhood; (b) the increased purity of the milk supply and its greater freedom from tuberculous infection; and (c) the lessened incidence of tuberculosis amongst women referred to above. The number of cases notified during the year of other forms of tuberculosis was 124. This is an increase of 3 notifications over that of the previous year.



DEATH-RATES FROM PULMONARY TUBERCULOSIS PER 10,000 OF THE
POPULATION IN BRADFORD ACCORDING TO SEX.



ANTI-TUBERCULOSIS CENTRE.

Report by H. VALLOW, M.D., D.P.H., Tuberculosis Officer.

The Anti-Tuberculosis Centre, or Tuberculosis Dispensary, is open for consultation on six sessions per week, one being a general evening session and one a session set apart specially for children.

The number of attendances at the Anti-Tuberculosis Centre during the year was 3,667; of these, 435 were new cases, and 246 contacts.

The diagnosis arrived at in these cases is seen in the following tables :—

				Adults		Children		Total	
				Male	Female	Male	Female	Male	Female
NEW CASES:—									
(a) Definitely Tuberculous...	...			111	71	18	20	129	91
(b) Diagnosis not completed	...			8	3	6	4	14	7
(c) Non-Tuberculous	...			85	71	21	17	106	88
Total	...	...		204	145	45	41	249	186
				Adults		Children		Total	
				Male	Female	Male	Female	Male	Female
CONTACTS:—									
(a) Definitely Tuberculous...	...			12	18	8	3	20	21
(b) Diagnosis not completed	...			—	—	—	—	—	—
(c) Non-Tuberculous	...			56	58	48	43	104	101
Total	...	...		68	76	56	46	124	122

The number of cases transferred from other areas and cases returned after discharge in previous years was 8; and the number transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of," was 91.

The number of cases written off the Dispensary Register as recovered, diagnosis not confirmed, or non-tuberculous, is given in the following table :—

				Adults		Children		Total	
				Male	Female	Male	Female	Male	Female
(a) Recovered:—									
Pulmonary Cases...	...	...		8	7	4	5	12	12
Non-Pulmonary Cases	...	...		5	3	8	6	13	9
(b) Diagnosis not confirmed or non-tuberculous									
...	...	...		147	133	70	65	217	198
Totals	...	...		160	143	82	76	242	219

The number of persons on the Dispensary Register on December 31st, 1933, is shown in the following table :—

	Pulmonary				Non-Pulmonary				Total			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
(a) Definitely tuberculous	461	399	110	98	43	49	186	141	504	448	296	239
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	10	4	6	4

The health visitors have paid 3,745 visits to the homes for Dispensary purposes.

Two thousand seven hundred and eleven specimens of sputum have been examined and 412 X-ray examinations made in connection with Dispensary work.

The number of persons on the Dispensary Register on January 1st was 1,531, and on December 31st, 1,511, of which 814 were " T.B. plus " cases.

Residential Treatment.

Patients have been sent to the Sanatoria and Hospitals as required, and the following return shows the extent of this residential treatment. Institutions :—Grassington Sanatorium, Bierley Hall Hospital, and St. Luke's Hospital (Tuberculosis Section).

Number of doubtfully tuberculous cases admitted for observation	Adults		In Institutions on Jan. 1	Admitted during the year	Discharged during the year	Died in the Institutions	In Institutions on Dec. 31
		M.	4	12	16	—	—
		F.	1	23	24	—	—
	Children	1	10	10	—	1	
Total ...		6	45	50	—	1	
Number of definitely tuberculous patients admitted for treatment	Adults	M.	82	236	172	59	87
		F.	54	165	121	33	65
	Children	45	89	87	7	40	
	Total ...		181	490	380	99	192
Grand Total		187	535	430	99	193

The following table shows the results of observation of doubtfully tuberculous cases discharged from Residential Institutions during the year 1933 :—

Diagnosis on discharge from observation		For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals		
		Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	...	—	—	—	1	3	—	—	—	1	—	7	1	3	8	
Non-tuberculous	...	—	1	—	2	4	—	3	3	—	5	9	10	17	1	
Doubtful	...	1	2	—	2	2	—	1	—	—	1	—	1	5	4	
Totals		...	1	3	—	5	9	—	4	3	1	6	9	9	16	24
															10	

The following table shows the immediate results of treatment of definitely tuberculous patients discharged from Residential Institutions during the year 1933 :—

Classification on admission to the Institution		Condition at time of discharge	Duration of Residential Treatment in the Institution															Grand Totals
			Under 3 months			3-6 months			6-12 months			More than 12 months			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis	Class T.B. Minus	Quiescent ...	7	2	—	3	5	—	2	3	—	—	—	1	12	10	1	23
		Not Quiescent ...	10	4	—	6	7	1	1	3	—	1	5	—	18	19	1	38
		Died in Institution	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
	Class T.B. plus Group 1	Quiescent ...	—	1	—	1	2	—	—	1	—	—	—	1	4	—	—	5
		Not Quiescent ...	1	1	—	—	—	—	—	1	—	—	—	1	2	—	—	3
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 2	Quiescent ...	—	—	—	—	—	—	1	1	—	—	—	1	1	—	—	2
		Not Quiescent ...	10	6	1	9	4	—	11	5	1	1	2	1	31	17	3	51
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. plus Group 3	Quiescent ...	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	1
		Not Quiescent ...	67	35	8	7	3	—	13	6	—	3	1	—	90	45	8	143
		Died in Institution	45	22	3	4	7	—	7	2	—	1	1	1	57	32	4	93
TOTALS		(PULMONARY)	141	71	12	30	28	1	35	22	1	6	10	3	212	131	17	360
Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent ...	—	—	—	—	—	—	—	—	—	1	—	1	1	—	1	2
		Not Quiescent ...	7	3	5	—	—	—	1	—	1	1	2	2	9	5	8	22
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Abdominal	Quiescent ...	—	1	—	—	1	—	—	—	—	—	—	—	2	—	—	2
		Not Quiescent ...	—	2	5	—	1	1	—	—	—	—	—	—	3	6	9	
		Died in Institution	—	—	1	—	1	—	—	—	—	—	—	—	1	1	2	
	Other Organs	Quiescent ...	—	—	—	—	4	—	—	3	—	—	2	—	—	9	9	
		Not Quiescent ...	7	10	8	—	—	5	1	1	2	—	—	1	8	11	16	35
		Died in Institution	1	—	1	—	—	—	—	—	—	—	—	1	—	1	2	
	Peripheral Glands	Quiescent ...	—	—	1	—	—	5	—	—	4	—	—	3	—	—	13	13
		Not Quiescent ...	—	1	13	—	—	4	—	—	3	—	—	1	—	21	22	
		Died in Institution	—	—	1	—	—	—	—	—	—	—	—	—	—	1	1	
TOTALS		(NON-PULMONARY)	15	17	35	—	3	19	2	1	13	2	2	10	19	23	77	119

GRASSINGTON SANATORIUM.

W. M. CUMMING, M.D., Ph.D., D.P.H., MEDICAL SUPERINTENDENT.

The beds are used for those cases of pulmonary and non-pulmonary forms of Tuberculosis in which there is reasonable prospect of cure or considerable improvement.

ADMISSIONS AND DISCHARGES, 1933.

	Adults		Children		Total	
	M.	F.	M.	F.	M.	F.
Remaining 31/12/32	44	35	18	19	62	54
Admitted	79	71	24	27	103	98
Discharged	74	67	20	29	94	96
Died	4	3	—	—	4	3
Remaining 31/12/33	48	39	19	14	67	53

Of the adult cases discharged, 12 men and 8 women stayed under one month. The reasons for this short stay were : 7 men and 4 women took their discharge against medical advice, 3 women were transferred to St. Luke's Hospital and Bierley Hall Hospital, 1 man died, 2 men and 1 woman were non-tuberculous, 1 man was certified fit for work, and 1 man returned home for personal reasons. Amongst the adult males 50 had well-established pulmonary tuberculosis, the tubercle bacillus being found in 35, but not in 15, and 9 had other forms of tubercle; amongst the adult females 37 had well-established pulmonary tuberculosis, the tubercle bacillus being found in 24, but not in 13, while 12 had other forms of tubercle. Amongst the children, 8 boys and 14 girls had intrathoracic tubercle.

Pulmonary Tuberculosis.

GAIN IN WEIGHT.

	Adults				Children	
	M.		F.		M.	F.
	T.B.+	T.B.—	T.B.+	T.B.—		
Average stay in days ...	181	164	309	311	209	283
Average age	31	37	27	22	9	9
Average gain in weight	7 $\frac{15}{16}$	6 $\frac{3}{16}$	8 $\frac{5}{16}$	10 $\frac{11}{16}$	7 $\frac{3}{16}$	11

Of the male adults, 40 gained weight, 4 lost weight, and 6 were too ill to be weighed. Of the female adults, 30 gained weight, 2 lost weight, and 5 were too ill to be weighed.

All the children gained in weight.

The capacity for work of the cases of pulmonary tuberculosis discharged in 1933 is shown below :—

	T.B.+		T.B.—		Total	
	M.	F.	M.	F.	M.	F.
Full Work	11	9	12	5	23	14
Light Work	6	5	1	3	7	8
Fit for Exercise	3	2	2	—	5	2
Unfit for Work	12	3	—	4	12	7
	32	19	15	12	47	31
Fit for Open Air School (children on adult ward)	—	3	—	1	—	4
Died in Institution	3	2	—	—	3	2

Other forms of Tuberculosis.

			Male.	Female.
Average stay in days	...	...	345	393
Average age ... ..	...	...	22	23
Average gain in weight	...	...	8 $\frac{4}{16}$	11 $\frac{6}{16}$

In all, 240 specimens of sputa were examined either by the ordinary direct method, or after concentration, or both. In 37 instances tubercle bacilli were demonstrated in the sputum after concentration when results had been negative with the direct method. During 1933 the dentist visited the Sanatorium periodically, and extracted 227 teeth, filled 24 teeth, scaled 15 teeth, made 1 denture, and carried out various minor operations.

The results of treatment of the children are shown on the following table :—

Result of Treatment of Children	Quiescent		Improved		No Material Improvement		Died		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(1) Intrathoracic Tubercle ...	2	8	6	6	—	—	—	—	8	14
(2) Other Forms...	5	7	4	6	—	—	—	—	9	13
(3) Suspected Cases	1	—	—	1	—	1	—	—	1	2
Totals ...	8	15	10	13	—	1	—	—	18	29

All children who are fit were recommended on discharge to go to the Open-Air School, or their own School.

The table showing results of treatment in adults is given on the following page, and from this table it is clear that the great majority in all the A. sub-classes and I.B and II.B are likely to improve with sanatorium treatment. Of the cases in III.B, about 50 per cent. of them will benefit, but very few cases in any of the C. sub-classes are likely to improve.

TABLE SHOWING RESULT OF TREATMENT.

[illegible]

NOTE ON CLASSIFICATION.—Pulmonary Tuberculosis cases in Adults are sub-divided into two classes:—(1) Tubercle Bacilli present in the sputum; (2) Tubercle Bacilli absent. Each of these classes is further sub-divided according to the extent of the lesion in the lung and the severity of the symptoms. For the extent of the lesion a modified Turban-Gerhardt system is used, Stage I being a localised lesion involving if both lungs, not more than the extent of the lung above the clavicle in front, and above the spine of the scapula behind; whilst if only one lung is affected, a lesion extending not lower than the second rib in front and the spine of the scapula behind is indicated. Stage 2 indicates a slight lesion up to one lobe, or a severe lesion of half a lobe. Stage 3 includes all other cases. The letters A, B and C are used to denote severity of symptoms in each case. A denotes constitutional disturbance absent or slight; B, intermediate between A and C; C, severe constitutional disturbance or deterioration. Constitutional disturbance is in each case estimated by degree of pyrexia, tachycardia, dyspnoea, malnutrition.

"The Kestrel's Nest."—In a Sanatorium many patients have much difficulty in usefully occupying their spare time and some organisation is required for this purpose. During the past year an attempt has been made in this direction by utilising a hut left by painting contractors, which was renovated and in which a modest equipment has been installed. It is called "The Kestrel's Nest" from the fact that the kestrel works so assiduously in the grounds of the institution. To some extent this "Kestrel's Nest" indicates a change of policy in Sanatorium administration, but this change, I believe, will be all to the benefit of the patients of the institution. There is no objection to the patients playing cards or billiards in their recreation hours, but this can be overdone and there are always some patients to whom such recreation does not appeal and who, if well enough, would prefer to be more usefully employed during these hours. "The Kestrel's Nest" gives patients an opportunity of being so employed and some interesting work has been developed there. The organisation of this work has been undertaken chiefly by the patients themselves, and no unnecessary restriction has been put upon its development. All patients, both men and women, have been encouraged to take part in it and the usual Sanatorium policy of segregating the sexes has not been adopted in this occupation centre, nor has it been necessary; indeed, the freer atmosphere of the occupation centre has definitely helped to promote efficiency. "The Kestrel's Nest" is not under the regular personal supervision of the staff, but is governed by a committee of patients whom I try to guide rather than to control. Its finances are on a voluntary basis and although they cannot yet be considered sound they are in a moderately satisfactory state. The work done consists of making various articles such as bed-tables, knee-desks, a canoe and the like; hand weaving, particularly scarves; the production of a Sanatorium Magazine, "The Sani Cough Drop," which, both in its literary merit and quality of production, has improved progressively; the formation and care of a Sanatorium library, quite an important matter, as the books presented to the Sanatorium consist of a strange mixture of useless and valuable reading. In addition also the committee arrange occasional Saturday evening whist drives for all the patients, the committee themselves supervising the meeting.

It must be realised that, with the exception of one or two patients who are not well enough for the usual grade work in the garden or an occasional one who happens to have suitable specialised training, all this work is done in the patients' spare time.

After several months' experience of the above schemes, I have no reason whatever to regret instituting them. The whole idea, of course, is obviously open to the criticism that I may chance to have at present a rather exceptional type of patient. This may be true, but I am already indebted to a number of patients for helping me to foster the tradition that it is considered "good form" to spend some of one's spare time in the "Kestrel's Nest."

Research.

1.—By W. M. CUMMING (MEDICAL SUPERINTENDENT).

The search for cases of pulmonary tuberculosis of bovine origin has been continued and, up to date, 32 cases have been demonstrated in England and Wales. After two years' intensive experience of the subject the writer is left without conviction on the question of the importance of "bovine phthisis." The questions raised in the last report concerning, chiefly, the infectivity of the disease from man to man still remain unanswered. One point, however, appears to be clarifying, in that it seems likely that in the general population the risk of infection is from the drinking of tuberculous milk, whilst in that section of the population whose daily life or work brings them much in contact with cattle the risk is from the inhalation of the tubercle-infected dust from the hides of the cattle or from the inhalation of droplets coughed out by cattle with an open lung lesion.

Below are tabulated the results of the investigation up to date:—

UNSELECTED CASES OF PULMONARY TUBERCULOSIS.

Residence of Case	Result of Investigation		Total
	Human T.B.	Bovine T.B.	
Bradford	336	9	345
Liverpool	222	1	223
Wales	204	2	206
Surrey	190	1	191
Northumberland and Durham	245	4	249
Totals...	1197	17	1214

SELECTED CASES OF PULMONARY TUBERCULOSIS.

Manner of Selection	Area and Type of Organism				Total	
	North		South		Human	Bovine
	Human	Bovine	Human	Bovine		
Complicating Glandular Tuberculosis ...	74	11	36	1	110	12
Children under 16 ...	93	1	63	2	156	3
Cattle contacts (farmers, milkers, etc.)	16	11	11	—	27	11
Associated with Lupus	—	—	—	—	6	1

From a statistical point of view the results in the unselected series are not considered significant in demonstrating any difference in the distribution of the disease throughout the country. They show, however, that although relatively rare, it is widespread.

The figures in the selected series, on the other hand, point definitely to the disease being commoner in the north of the country than in the south. They show also, among other points, that even although the route of infection cannot be said to have been settled with certainty, an occupation involving the care of cattle is definitely a dangerous one in that it may involve a real risk of contracting tuberculosis in one of its most crippling forms.

Tuberculosis is thought to be commoner in Ireland than in this country and in the rural areas the inhabitants live in closer contact with their animals. With this in view and with the co-operation of several sanatoria in the Free State and Northern Ireland, an investigation was made of more than 200 cases of pulmonary tuberculosis in Ireland, of which 70 were "cattle contacts," but in none was the organism bovine in origin. This finding is disconcerting.

II.—By DR. F. E. SMITH (ASSISTANT MEDICAL OFFICER).

Dr. Smith has recently instituted a research into the bacterial flora of sinuses in surgical tuberculosis, but on account of the paucity of the material available it will be some time before a finding of real value will be available. The two questions to be answered are:—

1. For how long can one hope to keep an incised tuberculosis abscess free of secondary infectors, and

2. What is the significance, from a prognostic point of view, of the demonstration in such sinuses of pyogenic cocci and, especially, of streptococci of the type generally described as hæmolytic?

The writer is indebted to the Medical Research Council for an expenses grant for the above investigations.

This report would be incomplete without some acknowledgment of the services of Miss Mary Williamson who, especially in the cultivation of the tubercle bacillus, has developed a technique that must be unrivalled in the country.

BIERLEY HALL HOSPITAL.

	Men.	Women.	Total.
Admissions	76	63	139
Discharges	45	33	78
Deaths	30	21	51
Number of patient days ...	11,424	7,733	19,157
Average number of beds occupied	31·3	21·1	52·4
Pulmonary cases	74	60	134
Non-Pulmonary cases	—	—	—
Observation cases	2	3	5

The total number of admissions shows an increase on that of the previous year and the average stay in hospital was longer. The average number of beds occupied and the number of patient days were higher than in 1932.

Of the 139 persons admitted during the year, 2 men and 3 women were doubtfully tuberculous and 74 men and 60 women were definitely tuberculous.

Of the 78 persons discharged during the year, 3 men and 4 women were doubtful cases of tuberculosis and were discharged much improved in health. Of the remaining 71 persons discharged, 42 were men and 29 women. When these are considered in groups, according to the stage of the disease, and whether the tubercle bacillus was found in the sputum or not, it is shown that treatment is most successful in the earlier stages of the disease, and when the tubercle bacillus is absent. In the first group where the tubercle bacillus was absent, 14 persons were discharged with the disease quiescent, and a further 6 greatly improved in health.

Of the remaining 51 persons discharged, the tubercle bacillus was found in the sputum. Two of those persons, in the early stage of the disease, were sent out with the disease arrested. The remaining 49 are those persons in whom the disease is well established in both lungs. All of those persons responded to treatment, but in no case could it be said that the disease was arrested completely. These 32 men and 17 women were discharged greatly improved in health.

A satisfactory feature of this year's work is the fact that 8 men and 7 women were sufficiently improved to be transferred to Grassington Sanatorium to continue their treatment in more rigorous surroundings before returning to their home life.

It cannot be too strongly urged upon those persons who have contracted pulmonary tuberculosis to seek institutional treatment at as early a stage of the disease as possible.

(C). VENEREAL DISEASES.

The Centre at the Municipal General Hospital is well equipped, and conveniently situated so as to serve the whole area. In the Municipal General Hospital itself beds are provided for indoor treatment of venereal disease in its various forms, and the provision made is adequate.

The number of new cases from the area of the City of Bradford and the attendances at the Venereal Diseases Centre since its opening are shown in the following table :—

Year	Venereal Diseases		Non-Venereal Diseases		Attendances	
	Males	Females	Males	Females	Males	Females
1918	200	175	34	41	1,604	1,639
1919	583	235	79	42	10,990	4,011
1920	627	311	121	31	21,129	9,174
1921	457	184	144	29	28,676	11,390
1922	403	164	126	31	23,162	7,863
1923	359	134	110	44	21,398	7,565
1924	315	123	103	50	17,390	5,615
1925	248	142	143	42	13,294	4,859
1926	374	119	43	29	20,095	4,957
1927	312	115	99	53	20,116	5,369
1928	344	122	141	83	20,972	5,253
1929	308	145	156	116	17,955	4,654
1930	311	145	165	110	19,215	6,230
1931	236	97	127	73	16,738	4,333
1932	336	111	146	68	16,720	4,243
1933	390	315	35	22	21,991	4,921

	Males	Females
1. Number of persons dealt with at the Out-patient Clinic for the first time and found to be:—		
Suffering from Syphilis	145	89
Suffering from Soft Chancre	—	—
Suffering from Gonorrhœa	306	40
Not suffering from Venereal Disease	149	84
Total	600	223
2. Number of persons discharged from the Out-patient Clinic after completion of treatment for:—		
Syphilis	27	10
Soft Chancre	—	—
Gonorrhœa	272	24
Total	299	34
3. Number of persons who ceased to attend the Out-patient Clinic without completing treatment and who were suffering from:—		
Syphilis	42	51
Soft Chancre	—	—
Gonorrhœa	74	5
Total	116	56
4. Total attendances of all persons at the Out-patient Clinic who were:—		
Suffering from Syphilis	3,708	2,150
Suffering from Soft Chancre	—	—
Suffering from Gonorrhœa	17,994	2,463
Not found to be suffering from Venereal Disease	289	308
Total	21,991	4,921
5. Aggregate number of "In-patient days" of treatment given to persons suffering from:—		
Syphilis	605	90
Soft Chancre	—	—
Gonorrhœa	194	162
Not suffering from Venereal Disease	—	—
Total	799	252
6. Number of persons treated with Salvarsan Substitutes ...	347	325

7. Number of doses of Salvarsan Substitutes given:—

Dose	Novarseno- billion	Silber Salvarsan	Sulpharsenol	Sulphostab
·05 grm.	—	—	—	—
·06 "	—	—	—	—
·10 "	17	1	—	—
·12 "	—	—	—	—
·15 "	258	33	—	24
·18 "	—	—	—	—
·20 "	—	48	—	10
·24 "	—	—	9	—
·30 "	452	18	4	33
·36 "	—	—	—	—
·42 "	—	—	—	—
·45 "	1,080	—	—	180
·48 "	—	—	—	—
·60 "	970	—	10	86
Total ...	2,777	100	23	333

Authorities responsible for patients:—

Area	New Cases	Number of Attendances at Out-patient Clinic	Aggregate number of In-patient Days	No. of doses of Salvarsan Substitutes used in Treatment Centre
Bradford ...	510	24,650	982	2,989
West Riding ...	90	2,262	69	334
Total ...	600	26,912	1,051	3,323

Number of out-patients remaining under treatment:—

				Bradford. West Riding Area.		
Male	...	...	...	370	...	55
Female	...	...	...	291	...	46
Total				661	...	101

Number of persons receiving in-patient treatment:—

Male	...	...	...	29	...	—
Female	...	...	...	12	...	1
Total				41	...	1

Pathological Examinations made in the Laboratory during the twelve months ending on the 31st December, 1933 :—

Nature of Test	For Treatment Centre	For Practitioners
	No. of Tests	No. of Tests
For detection of Spirochaetes	76	7
For detection of Gonococci	1282	775
For Wassermann reaction...	720	3904
Kahn Tests	697	2466
Other examinations ...	—	22
Totals	2775	7174

The number of doses of salvarsan supplied free to medical practitioners in Bradford by the Local Authority during 1933 was 228.

The following tables showing figures for the past four years seem to show that the prevalence of venereal disease is somewhat diminishing.

NUMBERS.

	1930	1931	1932	1933
Ophthalmia neonatorum cases notified ...	40	27	15	18
Congenital syphilis deaths registered ...	2	1	1	1
Still Birth cases notified	195	201	173	156

PROPORTIONS PER 1,000 BIRTHS.

	1930	1931	1932	1933
Ophthalmia neonatorum cases notified ...	9.1	6.6	3.7	4.6
Congenital syphilis deaths registered ...	0.46	0.25	0.25	0.26
Still Birth cases notified	44.6	50.5	43.0	38.3
Illegitimate Births registered	59.2	60.0	57.2	53.8

(D) OTHER DISEASES.

Malignant Diseases. Deaths, 504; Mortality rate per 1,000, 1·71.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	444	406	458	450	440	445	480	486	485	504

MORTALITY RATES PER 1,000 FROM MALIGNANT DISEASES SINCE 1924.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford	1·50	1·40	1·59	1·53	1·52	1·54	1·61	1·58	1·64	1·71
England and Wales	1·30	1·34	1·36	1·38	1·42	1·44	1·45	1·48	1·51	

As will be seen in the following table, deaths from malignant disease showed an increase last year in the male but not in the female sex.

MALIGNANT DISEASE IN BRADFORD ACCORDING TO SEX AND SITE.**CRUDE ANNUAL DEATH RATES PER 1,000**

Situation of Disease	1932			1933		
	Males	Females	Persons	Males	Females	Persons
Buccal Cavity and Pharynx	0·17	0·01	0·09	0·16	0·05	0·10
Digestive organs and Peritoneum	0·93	0·90	0·91	1·14	0·87	1·00
Respiratory organs	0·16	0·04	0·10	0·15	0·03	0·09
Uterus	—	0·33	0·17	—	0·33	0·17
Other female genital organs	—	0·07	0·04	—	0·05	0·03
Breast	—	0·27	0·14	—	0·30	0·15
Male genito-urinary organs	0·13	—	0·07	0·12	—	0·06
Skin	0·01	0·01	0·01	—	—	—
Other or unspecified organs	0·11	0·11	0·11	0·11	0·11	0·11
Total	1·52	1·74	1·64	1·68	1·73	1·71

The table on this page gives the number of deaths at different age periods in Bradford during the past four years according to the situation of the disease, and sex. This table shows that a very large majority of deaths from malignant disease now arise from affections of one or other of four sites—œsophagus and stomach, 445; rectum and colon, 424; uterus, 194; and breast, 191. It is, therefore, seen that by far the greatest number of deaths in the city from cancer occur from malignant disease affecting some part of the alimentary tract.

The table on page 77 gives the deaths for 1933 according to occupation, while the following table shows the deaths among occupied males during the past five years 1929-1933 :—

CANCER AND OCCUPATION.

DEATHS, 1929-1933—OCCUPIED MALES.

Occupation	Approximate number employed	Buccal Cavity and Pharynx	Digestive Organs and Peritoneum	Respiratory Organs	Genito-urinary Organs	Others	Total
Combing	3,500	9	32	8	2	16	67
Dyeing	4,500	6	35	5	6	13	65
Other Textiles ...	15,000	24	110	26	15	56	231
Engineering ...	10,000	12	41	11	8	47	119
Transport Workers	9,500	11	42	9	5	13	80
Building Trades ...	8,000	16	49	4	8	26	103
Commercial Workers ...	10,000	13	53	13	10	40	129
Clerical Workers...	4,500	5	17	8	4	28	62
Other occupations	30,000	25	77	11	11	61	185

This table seems to show an increased incidence among combers and dyers, but this conclusion can only be accepted with reservation, as the numbers are small and the estimate of those employed loose, while no correction is made for age differences. The higher incidence is not seen in any particular location of the disease.

In 1933 there were 96 deaths from malignant disease in the Municipal General Hospital, St. Luke's; 31 in the Bradford Royal Infirmary; 10 in the Duke of York Home; and 4 in other institutions in Bradford. Although only 28% of the cases died in hospital, the proportion of cases of malignant disease which in the course of their illness are treated in hospital is very large.

CANCER—OCCUPATION AND SITE.

DEATHS, 1933.

MALES						FEMALES						
Occupation	Buccal Cavity and Pharynx	Digestive Organs and Peritoneum	Respiratory Organs	Genito-urinary Organs	Others	Occupation	Genital Organs		Breast		Digestive Organs and Peritoneum	Others
							Married	Un-married	Married	Un-married		
Woolcombing	3	7	—	1	—	Woolcombing	—	1	—	—	—	—
Dyeing	2	9	—	—	1	Spinning	—	1	—	—	1	1
Other Textiles	1	36	5	5	3	Weaving	—	—	—	1	5	1
Engineering	2	13	3	2	3	Other Textiles	—	3	—	2	3	2
Transport Workers... ..	2	15	1	1	3	Commercial	—	—	—	—	—	—
Building Trades	4	23	2	3	2	Clerical	—	—	—	2	4	—
Commercial	1	19	4	1	1	Domestic	51	4	37	6	127	26
Clerical	3	9	2	1	1							
*Other Occupations... ..	4	22	4	2	—							
Total	22	153	21	16	14	Total	51	9	37	11	140	30

Cancer Investigation in Bradford.—In Bradford for some years an attempt has been made to investigate the histories of cases of malignant disease in the city, and records are accumulating as to the incidence prognosis and effects of treatment which throw some light on the position. The work has been done in close co-operation with the medical profession in practice, to whose active interest and sympathy its success is almost entirely due.

Malignant disease, including suspected malignant disease, is voluntarily notifiable, and practitioners are urged to notify all cases coming under their care. In a disease of this description considerable hesitation and difficulty is naturally felt by the practitioners in notifying, but last year 265 cases were reported as against 240 in 1932. In addition also the cases admitted to the hospitals and some nursing homes are reported, so that a considerable proportion of cases come under notice.

The following table shows the notifications received each year from general practitioners since 1928 and for comparison the number of deaths each year is set out in the table.

Year	Notifications			Deaths Total
	Male	Female	Total	
1928	95	58	153	440
1929	70	117	187	445
1930	105	123	228	480
1931	101	157	258	486
1932	96	144	240	485
1933	113	152	265	504
Totals	580	751	1331	2,840

The number of fatal cases of malignant disease in Bradford in the year 1933, of which no record was made prior to death, was 225, or 44·64% of the deaths of that year.

Since 1929 a careful investigation has been made of the histories of cases of malignant disease treated in Bradford Hospitals, and the records are shown in the following table, which gives, exclusive of cases treated prior to 1929, and exclusive of cases of rodent ulcer, 465 cases as alive on 31st December, 1933, treated in the previous five years. In addition to these cases 68 cases treated prior to 1929 and 70 cases of rodent ulcer treated since are known to be alive on 31st December, 1933, a total of 603.

RODENT ULCER.

RESULTS OF TREATMENT, 1929-1933.

Position at end of each year.	Year of admission to hospital	Nature of Treatment							Results				
		No. of Cases.	Radical Operation	Non-Radical Operation	Rad-ium		By Deep X-Ray Therapy	Not treated by Sur-gery, Radium or Deep X-Ray Therapy.	Died	Known to be Alive			
					Radical	Palliative				Condition			Total alive at the end of each year
										Leading Normal Life	In poor health	Not reported on	
1929	1929	8	—	—	7	1	—	—	1	7	—	—	7
1930	1929	7	—	—	7	—	—	—	—	7	—	—	7
	1930	13	—	—	11	2	—	—	1	12	—	—	12
													19
1931	1929	7	—	—	7	—	—	—	1	6	—	—	6
	1930	12	—	—	11	1	—	—	—	12	—	—	12
	1931	14	—	—	14	—	—	—	—	14	—	—	14
													32
1932	1929	6	—	—	6	—	—	—	—	6	—	—	6
	1930	12	—	—	12	—	—	—	—	12	—	—	12
	1931	14	—	—	14	—	—	—	1	13	—	—	13
	1932	15	—	—	15	—	—	—	1*	14	—	—	14
													45
1933	1929	6	—	—	6	—	—	—	1	5	—	—	5
	1930	12	—	—	12	—	—	—	1	11	—	—	11
	1931	13	—	—	13	—	—	—	—	13	—	—	13
	1932	14	—	—	14	—	—	—	—	14	—	—	14
	1933	27	—	—	26	1	—	—	—	24	1	2	27
													70

* died of Cerebral Hæmorrhage.

TABLE SHOWING APPROXIMATE LENGTH OF LIFE OF CASES OF MALIGNANT DISEASE
ADMITTED TO HOSPITAL DURING 1929-1933.

Year of admission to Hospital	Total Number of cases of cases who died	Approximate length of life											
		After Radical Operation			After Non-Radical Operation			After Treatment by Radium			After Treatment by Deep X-Rays		
		Lived not more than			Lived not more than			Lived not more than			Lived not more than		
		6 mos.	1 yr.	2 yrs.	3 yrs.	6 mos.	1 yr.	2 yrs.	3 yrs.	6 mos.	1 yr.	2 yrs.	3 yrs.
1929	210	10	5	14	3	22	12	5	—	25	24	18	4
1930	218	12	12	7	3	30	7	7	2	22	23	7	—
1931	210	15	—	1	—	40	8	3	—	15	20	9	—
1932	127	6	1	—	—	33	3	—	—	17	4	—	—
1933	117	6	3	—	—	19	—	—	—	21	9	—	—
Total ...	882	49	21	22	6	144	30	15	2	100	80	34	4
										22	12	4	—
										6	1	2	3
										6 mos.	yr.	yrs.	yrs.
										54	6	4	1
										73	—	—	—
										84	—	—	—
										59	—	—	—
										55	1	—	—
										325	7	4	1

This table shows that over 70 per cent. of the cases admitted to hospital were so advanced in the Disease that death occurred within 6 months of their admission to the hospital.

Respiratory Diseases. Deaths, 449; Mortality rate per 1,000, 1.18.

DEATHS FROM BRONCHITIS AND PNEUMONIA IN PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bronchitis ...	467	407	297	407	388	523	142	190	141	168
Pneumonia ...	375	350	218	373	252	417	266	282	234	249

AGE INCIDENCE OF DEATHS.

Age Periods	1 year	1-2	2-5	5-15	15-25	25-45	45-65	65 upwards
Bronchitis	10	—	—	—	—	6	38	114
Pneumonia	56	17	20	6	11	25	62	52

Rheumatic Fever and Organic Heart Disease. Deaths, 1,135; Mortality rate per 1,000, 3.85.

The deaths from rheumatic fever numbered 8 and from organic heart disease 1,127.

The ages at death of the total number of fatal cases of rheumatic fever during the past ten years has been as follows :—

AGE INCIDENCE OF DEATHS FROM RHEUMATIC FEVER, 1924-1933.

	Under 5 years	5-15	15-25	25-45	45-65	Over 65 years
Deaths ...	3	31	27	36	33	25

Deaths from organic heart disease in 1933 occurred in 548 cases amongst males, and in 579 cases amongst females. This gives a death-rate of 4.03 per 1,000 amongst males, and 3.64 per 1,000 amongst females.

DEATHS FROM ORGANIC HEART DISEASE, 1933, ACCORDING TO SEX AND AGE.

Sex	Under 5 yrs.	5-15	15-25	25-45	45-65	Over 65 yrs.	Total
Males ...	—	3	—	24	177	344	548
Females ...	—	4	9	38	148	380	579
Total ...	—	7	9	62	325	724	1,127

Cerebro-Spinal Fever. There were 10 cases notified, with 7 deaths, in 1933, as against 9 cases, with 4 deaths, in the previous year.

Encephalitis-Lethargica. The cases numbered 5 and the deaths 3, as against 2 cases, with 2 deaths, in the previous year.

Acute Polioencephalitis. There were no cases notified during the year.

Deaths from Violence. Deaths, 189; Mortality rate per 1,000, 0·64.

RECORD OF PREVIOUS YEARS.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Deaths	145	162	164	171	195	167	188	179	168	189
Mortality rate per 1,000	0·49	0·56	0·57	0·58	0·68	0·58	0·63	0·59	0·57	0·64

V.—MATERNITY AND CHILD WELFARE.

(A) INFANT MORTALITY IN 1933.

The infantile mortality rate for the year was 79 per 1,000 births. This rate is 4 per 1,000 births more than the corrected rate for 1932.

CORRECTED INFANTILE MORTALITY RATES FROM 1924.

Year	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Bradford ...	91	94	91	91	70	79	75	71	75	79
England and Wales	74	75	70	69	66	74	60	66	65	64

Age Distribution of Infantile Mortality. The infantile mortality rate in the first four weeks of life may be taken as an indication of the operation of antenatal and neonatal causes in bringing about infant deaths. This rate from 1909 is seen in the following table, where it will be noticed that the infantile mortality during these early weeks of life has, on the whole, been showing a continuous fall during the past twenty years.

INFANTILE MORTALITY RATE PER 1,000 BIRTHS IN THE FIRST FOUR WEEKS OF LIFE, FROM 1909.

Year	Bradford					England and Wales
	Week				Total for four Weeks	Total for four Weeks
	1	2	3	4		
1909	34.3	4.7	5.2	5.2	49	41
1910	28.0	6.2	5.3	5.8	45	38
1911	33.7	7.3	5.6	4.7	51	40
1912	29.4	5.1	5.7	3.2	43	38
1913	32.1	6.5	6.2	3.1	48	39
1914	27.3	5.9	7.2	3.8	44	39
1915	28.2	6.5	5.3	3.9	44	38
1916	31.1	8.1	4.7	4.7	49	37
1917	31.2	7.4	2.6	3.0	44	37
1918	28.1	6.2	3.6	3.6	42	36
1919	34.0	5.9	4.2	2.7	47	40
1920	27.8	8.9	5.8	3.6	46	35
1921	29.9	6.8	4.9	2.8	45	35
1922	22.2	6.5	5.0	3.8	37	34
1923	22.9	5.3	4.0	4.2	36	32
1924	27.3	4.8	5.0	2.4	40	33
1925	23.8	4.1	4.8	3.1	36	32
1926	24.0	6.2	5.5	3.2	39	32
1927	25.0	5.8	3.0	2.5	36	32
1928	26.2	4.3	2.5	0.9	34	31
1929	24.4	3.7	3.9	3.2	35	33
1930	26.7	5.3	3.9	1.6	37	31
1931	26.5	5.6	2.9	2.2	37	32
1932	31.6	5.2	2.0	2.2	41	32
1933	21.3	3.8	4.9	2.1	32	—

For the remainder of the first year of life, the Infantile Mortality Rate per 1,000 births is given in the following table, which shows a comparatively low rate of infantile mortality after the first month.

INFANTILE MORTALITY RATE PER 1,000 BIRTHS AFTER THE FIRST MONTH OF LIFE, FROM 1909.

Year	1 to 3 months		3 to 6 months		6 to 12 months	
	Bradford	England and Wales	Bradford	England and Wales	Bradford	England and Wales
1909	22	20	19	19	29	29
1910	22	20	21	19	34	28
1911	26	25	28	26	35	39
1912	19	18	14	15	22	24
1913	21	20	27	20	31	29
1914*	22	19	20	19	35	28
1915*	19	19	21	19	34	34
1916*	24	17	19	15	24	22
1917*	23	17	24	16	31	26
1918*	23	17	23	16	35	28
1919*	18	15	20	13	28	21
1920*	20	16	17	13	17	17
1921*	23	15	18	14	22	19
1922*	15	13	13	11	21	19
1923*	13	11	13	10	15	16
1924*	18	12	14	11	20	19
1925*	16	13	17	11	26	19
1926*	15	12	15	10	22	16
1927*	15	11	15	10	25	17
1928*	15	11	10	9	11	14
1929*	12	12	10	11	23	10
1930*	13	10	9	8	15	12
1931*	11	11	10	9	12	15
1932*	12	11	7	9	15	13
1933*	14	—	15	—	18	—

* The figures of infantile mortality for Bradford for these years are founded on numbers of births corrected in each year.

Illegitimacy and Infantile Mortality. Since 1924 the number and the percentage of illegitimate births are shown in the following table :—

ILLEGITIMACY IN BRADFORD FROM 1924.

Year	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Number	285	227	260	255	240	220	259	245	230	210
Percentage of total births	5·7	4·7	5·5	5·9	5·4	5·1	5·9	6·0	5·7	5·4

The infantile mortality rate is always very much higher among illegitimate than among legitimate infants. The following table shows the corrected Infantile Mortality Rates amongst these two classes of infants for the past ten years :—

CORRECTED INFANTILE MORTALITY RATES AMONG ILLEGITIMATE AND
LEGITIMATE INFANTS.

Year	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Illegitimate ...	144	123	142	133	115	128	116	122	113	138
Legitimate ...	89	94	89	91	67	77	72	68	73	76

Place Distribution of Infantile Mortality. The Ward which showed the highest infantile mortality was West, where the rate was 123 per 1,000 births, while the North, South, and Exchange Wards also showed a rate above 100 per 1,000. The rate was lowest in Clayton, Eccleshill, and Idle Wards, in each of which it was below 50 per 1,000. The record of infantile mortality for the past 10 years in the different wards of the city is shown in the table on page 88.

Causes of Death in Infantile Mortality. The table on page 89 shows the deaths from stated causes under one year for the past ten years, and the following table shows the rate from certain of the most serious causes.

INFANTILE MORTALITY PER 1,000 BIRTHS FROM DEVELOPMENTAL AND
WASTING DISEASES IN BRADFORD SINCE 1924.

Cause of Death	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Premature Birth...	22.2	18.0	22.3	22.0	24.0	18.2	20.0	19.8	24.6	16.1
Atrophy, Debility, and Marasmus ...	7.4	12.6	11.3	7.2	4.8	7.4	8.5	4.2	4.5	11.0
Congenital Mal- formations ...	8.0	7.2	7.6	5.1	5.4	5.5	5.5	5.9	6.7	6.4
Atelectasis ...	0.4	0.8	1.1	1.6	0.7	0.5	3.4	4.4	1.5	2.1

INFANT MORTALITY RATE PER 1,000 BIRTHS, IN WARDS, FOR THE
YEARS 1924 TO 1933.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Allerton	26	60	44	63	62	53	73	68	61	82
Bolton	88	75	99	104	75	60	67	45	47	91
Bradford Moor	94	76	82	99	40	70	57	57	62	85
Clayton	53	53	97	34	28	39	81	62	58	28
East	76	83	86	94	60	126	70	64	86	72
East Bowling	107	111	164	113	74	98	77	99	101	87
Eccleshill	84	63	129	61	45	41	85	75	76	47
Exchange	141	102	169	185	140	182	68	86	93	107
Great Horton	64	77	57	61	52	62	34	59	57	50
Heaton	54	64	97	91	66	72	54	38	77	74
Idle	58	70	61	86	49	92	86	64	96	47
Listerhills	112	91	111	107	71	105	95	70	62	71
Little Horton	92	106	67	102	64	101	60	53	56	87
Manningham	99	78	65	75	43	39	73	48	66	95
North	143	161	133	120	87	106	96	86	73	112
North Bierley (East)	112	85	88	109	72	69	77	94	83	77
North Bierley (West)	73	100	73	75	87	62	71	88	97	71
South	125	116	130	117	101	108	108	118	144	110
Thornton	22	96	105	50	89	34	44	25	48	51
Tong	70	95	57	124	136	59	65	64	37	96
West	127	153	105	105	124	115	104	125	91	123
West Bowling	87	127	59	71	68	73	101	73	72	77
City	92	95	92	92	69	80	75	71	75	79

Causes of Death.	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Small-pox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	1	—	—	—	—
Measles	1	15	3	21	2	8	—	2	4	6
Scarlet Fever	—	—	—	—	1	—	1	—	—	—
Whooping Cough	12	20	16	7	21	9	24	3	8	5
Diphtheria and Group	1	2	3	4	1	3	2	1	1	1
Erysipelas	—	—	—	2	1	1	1	1	—	3
Tuberculous Meningitis	5	1	2	8	2	2	1	2	5	4
Abdominal Tuberculosis	3	2	1	—	1	1	—	—	—	1
Other Tuberculous Diseases	1	1	4	—	—	2	—	3	1	1
Meningitis (not tuberculous)	5	3	4	3	2	6	3	5	6	5
Convulsions	39	27	25	28	10	22	21	20	15	11
Laryngitis	—	—	—	2	—	2	—	—	—	—
Bronchitis	28	36	20	20	7	17	9	12	6	10
Pneumonia (all forms) ...	75	80	39	77	40	62	30	48	39	56
Diarrhœa and Enteritis	31	36	63	30	28	20	23	22	25	32
Gastritis	3	1	2	4	2	—	3	—	—	3
Syphilis	8	8	6	3	3	6	2	1	1	1
Rickets	3	—	1	1	—	1	—	1	1	—
Suffocation (overlying)	2	2	4	4	6	6	4	4	3	1
Injury at Birth	9	2	2	8	5	4	9	1	6	4
Atelectasis	2	4	5	7	3	2	15	18	6	8
Congenital Malformations	40	35	36	22	24	24	24	24	27	25
Premature Birth	111	87	105	91	106	79	87	81	99	63
Atrophy, Debility, and Marasmus	37	61	53	31	21	32	37	17	18	43
Other Causes	46	38	41	31	21	36	29	26	28	27
Total	462	461	435	404	307	346	327	292	302	310

INFANTILE MORTALITY IN CERTAIN GREAT TOWNS FROM 1924.
Deaths per 1,000 Births.

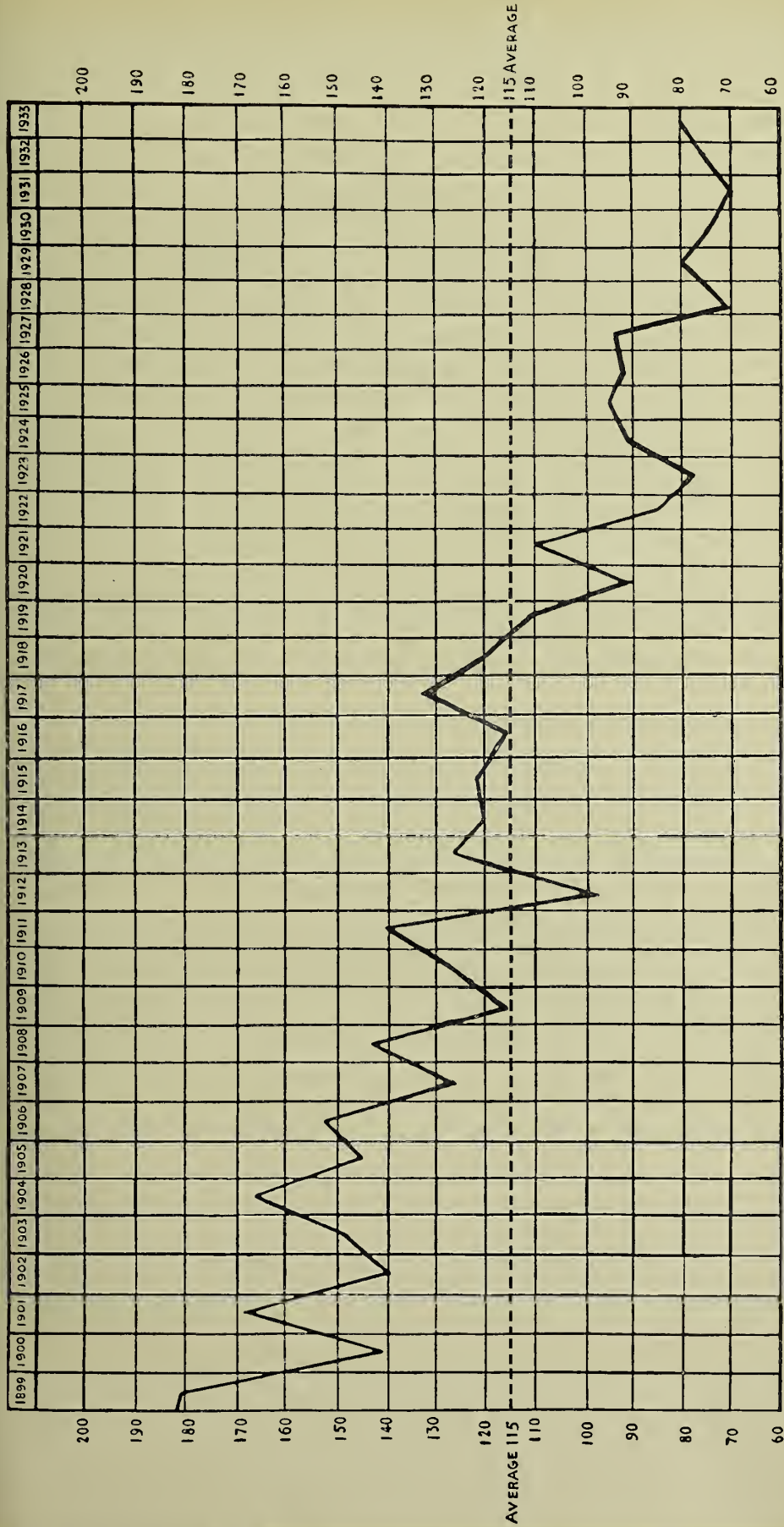
Town.	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Birmingham	80	75	70	72	65	79	62	70	68	66
Bradford	92	95	92	92	69	80	75	71	75	79
Bristol	69	76	68	56	61	61	59	53	53	55
Halifax	93	83	75	81	65	74	62	75	81	86
Huddersfield	95	68	55	71	65	78	56	59	52	48
Hull	90	100	91	91	80	107	71	83	68	77
Leeds	102	87	87	77	77	96	66	76	88	81
Leicester	76	86	74	76	70	81	55	64	70	75
Liverpool	102	98	103	91	92	95	81	93	91	89
London	69	67	64	59	67	70	59	64	67	60
Manchester	97	92	83	82	90	96	78	82	86	75
Newcastle	89	79	78	75	82	83	71	92	76	76
Nottingham	84	94	98	82	85	95	76	82	80	85
Portsmouth	66	61	53	54	54	67	57	55	60	51
Salford	119	103	98	75	96	114	75	88	97	80
Sheffield	88	83	78	89	73	87	66	69	73	63
Stoke-on-Trent	100	105	99	97	86	103	71	98	87	89
West Ham	69	58	56	60	64	77	65	67	72	70

INFANT MORTALITY, 1907-1933.

YEAR	Deaths under One Year of Age per 1000 Births		
	Total	Diarrhoeal Diseases	Total less Diarrhoeal Diseases
1907	124	11	113
1908	143	30	113
1909	116	6	110
1910	127	20	107
1911	139	32	107
1912	99	4	95
1913	128	27	101
1914	122	15	107
1915	123	16	107
1916	119	11	108
1917	132	8	124
1918	125	9	116
1919	114	8	106
1920	93	6	87
1921	109	8	101
1922	87	4	83
1923	78	4	74
1924	92	6	86
1925	95	7	88
1926	92	13	79
1927	92	7	85
1928	69	6	63
1929	80	5	75
1930	75	5	70
1931	71	5	66
1932	75	6	69
1933	79	8	71

INFANT MORTALITY IN BRADFORD AND ENGLAND AND WALES
FOR EACH YEAR, AND IN GROUPS OF FIVE YEARS SINCE 1886.

BRADFORD.			ENGLAND AND WALES.		BRADFORD.			ENGLAND AND WALES.	
		Average		Average			Average		Average
1886	168	170	149	145	1911	139	122	130	110
1887	179		145		1912	99		95	
1888	153		136		1913	128		109	
1889	181		144		1914	122		105	
1890	169	176	151	151	1915	123	117	110	91
1891	181		149		1916	119		91	
1892	155		148		1917	132		97	
1893	198		159		1918	125		97	
1894	144	165	137	156	1919	114	92	89	76
1895	203		161		1920	93		80	
1896	143		148		1921	109		83	
1897	179		156		1922	87		77	
1898	184	153	160	138	1923	78	82	69	68
1899	181		163		1924	92		75	
1900	140		154		1925	95		75	
1901	168		151		1926	92		70	
1902	139	132	133	117	1927	92	79	69	64
1903	148		132		1928	69		65	
1904	167		145		1929	80		74	
1905	144		128		1930	75		60	
1906	152	132	132	109	1931	71	64	66	
1907	124		118		1932	75		65	
1908	143		120		1933	79		64	
1909	116		109						
1910	127		106						



(B) MATERNITY.

Supervision of Midwives. The work is undertaken by an assistant medical officer for Maternity and Child Welfare, with a nurse assistant inspector of midwives. The number of midwives practising in Bradford on the 31st December, 1933, was 69, of whom 68 held the Certificate of the Central Midwives Board by examination, or its equivalent, while one was on the roll as *bona-fide* practitioner before the passing of the Midwives Act, 1902. Inspection of the midwives' work was carried out on 324 occasions, of which 224 were routine inspections and 100 special inspections. In accordance with the provisions of the Nursing Homes Registration Act, 1927, maternity homes have been inspected regularly throughout the year.

In Bradford the midwives attended in 1933, 2,666 or 65·5% of the registered births. The number of cases attended by each midwife has varied from none to 156; their work is seen in the following table :—

NUMBER OF CASES ATTENDED BY MIDWIVES, 1933.

Number of Cases	Trained Midwives		Untrained Midwives	
	No.	Total Cases	No.	Total Cases
Over 150	1	156	—	—
130—150	4	542	—	—
110—130	4	473	—	—
90—110	1	106	—	—
70—90	7	536	—	—
50—70	6	354	—	—
30—50	7	218	—	—
10—30	14	232	1	20
Under 10	15	29	—	—
None	9	—	—	—
Total	68	2,646	1	20

The number of cases now attended by untrained midwives is very small indeed, amounting only to 75% of the total attended by midwives.

The number of notifications of sending for medical help was 505, or 18.9% of their cases. In 422 cases medical aid was called in on account of the mother, and in 83 cases on account of the child. The reasons given for medical aid in the case of the mother were as follows :—

Ruptured Perineum 160; Uterine Inertia 25; Malpresentation 27; A.P. Hæmorrhage 12; Pyrexia 17; Adherent Placenta 23; P.P. Hæmorrhage 21; Contracted Pelvis 5; Premature Birth 8; Chest Trouble 1; Debility 9; Abortion 4; Dead Fœtus 4; Albuminuria 8; Œdema 3; Heart Trouble 1; Ante-Natal 3; Prolonged Labour 76; Mastitis 3; Patients' Request 3; Emergency 5; Prolapse of Cord 4.

In the case of the child, the reasons for sending for medical help were as follows :—Dangerous Feebleness (premature or otherwise) 28; Inflammation of Eyes 33; Convulsions 5; Malformation 1; Skin Eruption 3; Spina Bifida 3; Abnormal Condition 6; Tongue Tie 1; Circumcision 1; Injury 2.

Two notices were sent to the Local Supervising Authority of the deaths of infants under the care of midwives before the arrival of a medical practitioner. The midwives reported 30 still births, or about 1.1% of their cases.

The number of cases attended by municipal midwives in the city was 437, or 16.4% of the total cases attended by midwives in the city. The average number of cases attended in 1933 by each municipal midwife was 62. The following statement shows the work done by municipal midwives in two years, 1932 and 1933, as compared with the total work by midwives in the city.

WORK OF MUNICIPAL MIDWIVES.

	1932		1933	
	All Midwives	Municipal Midwives	All Midwives	Municipal Midwives
Births Attended ...	2,854	595	2,666	437
Medical Aid Notices ...	613	146	505	112
Still Births	34	15	30	15
Death of Mother... ..	3	1	3	1
High Temperature ...	16	8	17	5
Total Visits to Patients...	39,403	8,766	34,830	6,612
Ante-Natal Visits ...	10,146	2,454	9,543	1,753

Under the Midwives Act, 1918, the total number of claims for midwifery fees sent in by medical practitioners during 1933 was 236. The Local Supervising Authority determined to recover in full 122 of these claims, and in part 33, leaving 81 paid in full by the Authority. The total cost to the Authority of these claims was £144 11s.

Ante-Natal Work. The health visitors carry out home supervision of cases not attending an ante-natal clinic or not under medical supervision, or not attended by a municipal midwife. During 1933 they had 265 expectant mothers under observation before the birth of the child, 860 expectant mothers being visited by either municipal midwives or health visitors during the year. The total number of patients attending the various ante-natal clinics in 1933 was 2,029, including St. Luke's Hospital, and the number of attendances 7,777. Altogether, therefore, 2,889 expectant mothers, or 72·0% of the births, came under some degree of ante-natal supervision during the year.

Still Births. The number of still births registered in 1933 was 162, or 4·1% of the live births registered. The number notified, however, was only 156, and for purposes of comparison the following table is given :—

STILL BIRTHS NOTIFIED IN PREVIOUS YEARS.

Year ...	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Number	221	198	186	203	195	200	183	195	177	173	156
Per cent.	4.2	4.0	3.8	4.2	4.5	4.7	4.2	4.3	4.3	4.3	4.0

Deaths of Women in Childbirth. In the tables at the end of the report 21 deaths occurring in the puerperal state in the city are shown.

These deaths are classified in the three following tables, according to the age periods of the mother, the duration of pregnancy, and the condition from which the deaths arose.

DEATHS IN CHILD BIRTH.

(1) *Age Period and Classified Cause.*

Classified Cause	Age Period						
	20 years	25 years	30 years	35 years	40 years	45 years	Total
Toxaemias	—	2	1	1	1	—	5
Septic Conditions ...	3	2	2	2	—	—	9
Accidents of Preg- nancy	4	1	—	1	—	—	6
Accidents of Parturi- tion	—	—	—	1	—	—	1
Totals... ..	7	5	3	5	1	—	21

(2) *Duration of Pregnancy and Classified Cause.*

Classified Cause	Duration of Pregnancy									
	1 mon.	2 mos.	3 mos.	4 mos.	5 mos.	6 mos.	7 mos.	8 mos.	9 mos.	Total
Toxaemias	—	—	—	—	—	1	—	1	3	5
Septic Conditions ...	—	—	—	—	—	2	1	2	4	9
Accidents of	—	—	—	—	—	—	—	1	5	6
Pregnancy	—	—	—	—	—	—	—	—	1	1
Accidents of	—	—	—	—	—	—	—	—	1	1
Parturition... ..	—	—	—	—	—	—	—	—	1	1
Totals	—	—	—	—	—	3	1	4	13	21

(3) *Age Period and Duration of Pregnancy.*

Duration of Pregnancy			Age Period						Total
			20 years	25 years	30 years	35 years	40 years	45 years	
1 month	...	...	—	—	—	—	—	—	—
2 months	...	...	—	—	—	—	—	—	—
3 months	...	...	—	—	—	—	—	—	—
4 months	...	...	—	—	—	—	—	—	—
5 months	...	...	—	—	—	—	—	—	—
6 months	...	...	—	—	1	1	1	—	3
7 months	...	...	1	—	—	—	—	—	1
8 months	...	...	1	2	—	1	—	—	4
9 months	...	...	5	3	2	3	—	—	13
Totals...	...	...	7	5	3	5	1	—	21

The accommodation for maternity cases available in Bradford includes 10 beds in the Bradford Maternity Hospital, 90 beds at the Municipal General Hospital, and about 28 at St. Monica's Home.

The maternity cases at the Municipal General Hospital numbered 1,513 and are reported on page 123.

The number of maternity cases dealt with at the Bradford Maternity Hospital in 1933 was 140. The number of live children born was 137, including 15 premature births, 3 of whom died within 10 days, and the number of still births was 3.

The number of maternity cases dealt with at St. Monica's Home in 1933 was 70.

The number of Puerperal Fever cases notified in 1933 was 17, and of Puerperal Pyrexia 44, of which 50 were admitted to Hospital, 11 nursed at home. There were 9 deaths from Puerperal Fever.

The total number of cases of Ophthalmia Neonatorum notified was 16. Of these, 4 were born in the Municipal General Hospital. In 14 cases the vision was unimpaired and in 2 cases impaired. In no case was the vision lost.

(C) INFANCY.

During the year 1933 the number of births registered in Bradford was 4,195, while the number notified under the Notification of Births Act, 1907, was 4,072.

RECORD OF PREVIOUS YEARS.

	1926	1927	1928	1929	1930	1931	1932	1933
Births registered	4,708	4,316	4,471	4,396	4,445	4,368	4,371	4,195
Births notified	4,702	4,368	4,443	4,406	4,506	4,277	4,213	4,072
Notifications to 100 registrations	99·9	101·2	99·4	100·2	101·4	97·8	96·4	97·1

TIME OF RECEIPT OF NOTIFICATION OF BIRTH IN 1933.

Persons notifying	Receipt of Notification							Total	Per cent received late
	Within 2 days	3-7 days	1-2 weeks	2-3 weeks	3-4 weeks	1-2 m'nths	2-3 m'nths		
Doctor ...	155	52	8	1	—	2	—	218	28·8
Midwife ...	1956	671	41	1	—	—	—	2669	26·7
Father ...	18	12	5	—	—	—	—	35	48·6
Doctor and Midwife ...	20	13	2	—	—	—	—	35	42·9
Father and Doctor ...	1	2	—	—	—	—	—	3	66·6
Institutions	959	152	—	1	—	—	—	1112	13·8
Total ...	3109	902	56	3	—	2	—	4072	23·6

Following the receipt of the notification generally all cases notified by midwives are visited as soon as possible after the birth, and also those cases with doctors in attendance where the home circumstances seem to warrant it. The number of births notified in 1933 which were visited was 3,688, or 93 per cent. of all the births.

BIRTHS VISITED IN 1933.

Person in attendance	Times between Birth and Visit					Total
	1 week	2 weeks	3 weeks	4 weeks	Over 4 weeks	
Doctor	331	58	9	3	10	411
Midwife	2,130	71	9	—	5	2,215
Institution	—	1,032	28	1	1	1,062

Of the 3,688 births visited it was considered that 86 required visitation once only during the first year, while 3,602 were selected for more frequent revisitation during their first year of life. The total number of visits paid in 1933 to infants was 33,935.

FEEDING OF INFANTS UNDER VISITATION COMPLETING FIRST YEAR.

	Hand fed from birth	Mixed feeding from birth	Wholly breast fed				
			Under 1 month	Under 3 months	Under 6 months	Under 9 months	9 months and over
Infants ...	60	40	125	1,363	253	1,718	30
Percentage ...	1.7	1.1	3.5	38.0	7.0	47.9	0.9

WORK OF MOTHERS IN 1933.

	Outside the home			Inside the Home
	Factories	Other Work	Total	
Within six months before birth ...	137	22	159	3,410
Within six months after birth ...	171	22	193	3,376

This table as compared with the previous year shows a less number of mothers employed outside the home before and after birth.

Of the 159 mothers working within six months before confinement 8 were employed within three months before birth, and of the 193 mothers working within six months after confinement 15 returned to work within three months after the birth.

Child Centres. The Local Authority conducts 11 Child Clinics in the city, at each of which a medical officer attends. The principal child clinic is situated in Morley Street, and it is open every week-day morning and afternoon except Thursdays and Saturdays, when it is open in the morning only. The following table shows the location of each clinic, the days on which it is in operation, and the total attendances last year.

CHILD CLINICS IN BRADFORD.

Clinic	Days of Attendance	Times of Attendance	Attendances during year
Central, Morley Street...	Daily	Morning and Afternoon	34,244
Mount Street	Tuesday	Morning and Afternoon	3,471
Green Lane	Monday and Thursday	Afternoon only	4,918
Otley Road	Wednesday	Morning and Afternoon	6,389
Brownroyd	Thursday	Morning and Afternoon	5,666
Great Horton	Monday	Morning only	2,095
Wakefield Road	Wednesday	Afternoon only	2,678
Low Moor	Tuesday	Afternoon only	1,997
Lapage Street	Thursday	Afternoon only	3,457
Idle	Friday	Afternoon only	2,684
Clayton	Alternate Wednesdays	Afternoon only	482

These Centres are all doing excellent work and are keenly appreciated by those who take advantage of their services. They are primarily special educational institutions for instruction to mothers on how to keep babies and young children healthy. Mothers seeking such knowledge are welcomed, especially if the baby is well; it is too late often to seek this information when the baby is ill. All mothers require this knowledge, and the work of the Centres is directed to benefiting the child through the mother, whose co-operation is most desired.

The number of attendances in 1933 at the Central Clinic was 34,244, and the number at the District Clinics 33,837, an average of 68 cases per session at the Central Clinics, and 50 cases per session at the District Clinics. There has been an increase of 1,848 attendances at child clinics during 1933, which is altogether satisfactory.

The number of children registered for the first time at the Child Clinics in 1933 was 2,634. The following table shows the growth of the work since its inception :—

CHILD CLINICS.

Year	New Cases	Total attendances	Average weekly attendances	Average daily attendances
1914	2,488	31,193	600	120
1915	1,987	28,192	540	108
1916	1,998	23,490	452	90
1917	1,721	19,194	369	74
1918	1,606	17,068	328	65
1919	1,810	19,495	375	75
1920	2,832	28,829	554	110
1921	2,872	35,784	688	137
1922	2,115	25,868	497	99
1923	1,926	24,320	468	93
1924	1,822	24,952	480	96
1925	3,102	35,937	680	136
1926	2,551	38,279	736	147
1927	2,341	41,337	795	159
1928	2,604	50,689	975	195
1929	2,804	55,030	1,101	220
1930	2,908	60,135	1,203	241
1931	2,782	64,749	1,295	259
1932	2,633	66,233	1,325	265
1933	2,634	68,081	1,362	272

The work at the Central Clinic is arranged into sessions for infants, sessions for children, and "family" sessions attended by mothers who have an infant and one or more children. At the Branch Clinics, which are attended for the most part by mothers with families—infants and young children are dealt with at each session.

Death-rate Among Young Children. The mortality rates among children from 1—2 years and 2—5 years are seen in the following tables. The number of cases of Measles coming under notice under 5 years of age was 2,602, of whom 128 were removed to municipal hospitals. The number of cases of Whooping Cough under 5 years was 444.

MORTALITY RATE BETWEEN 1 AND 2 YEARS PER 1,000 PERSONS LIVING
AT THESE AGES.

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
General Mortality Rate	25.8	30.1	18.6	26.3	14.7	28.8	16.9	15.4	9.0	15.9
Mortality Rate from specified Group Causes:—										
Common Infectious Diseases	4.26	13.31	3.45	7.81	3.49	8.40	6.30	3.79	3.10	4.05
Influenza	1.28	0.22	—	0.47	—	0.51	0.25	0.50	0.52	1.08
Tuberculosis	2.34	2.40	2.76	2.13	1.25	2.54	1.77	1.26	0.52	1.62
Bronchitis and Pneumonia	10.23	8.94	4.83	11.13	4.74	12.9	3.53	5.55	3.88	4.59
Diarrhoea and Enteritis	0.85	1.53	2.07	0.71	2.00	0.76	1.26	0.50	—	0.54
Estimated Population between 1 and 2 years on June 30th ...	4,692	4,584	4,347	4,223	4,008	3,928	3,968	3,961	3,871	3,706

MORTALITY RATE BETWEEN 2 AND 5 YEARS PER 1,000 PERSONS LIVING
AT THESE AGES.

	1926	1927	1928	1929	1930	1931	1932	1933
General Mortality Rate	4.75	7.74	4.08	7.08	5.16	4.84	4.17	6.07
Mortality Rate from Specified Group Causes:—								
Common Infectious Diseases	1.29	2.63	0.85	2.01	2.00	1.19	1.11	1.62
Influenza	0.0	0.15	0.08	0.32	0.08	0.08	0.26	0.17
Tuberculosis	0.65	0.58	0.54	0.64	0.42	0.34	0.77	0.68
Bronchitis and Pneumonia	0.72	2.12	0.77	1.93	1.08	1.70	0.77	1.71
Estimated Population between 2 and 5 years on June 30th ...	13,907	13,703	12,999	12,422	12,022	11,780	11,748	11,697

(D) GENERAL.

The Health Visitors paid 71,570 visits to cases during the year. Of these, 265 were made to ante-natal cases, 33,935 to infants under 1 year, 3,688 being primary visits, 28,046 to children between 1 and 5 years of age, 3,745 to tuberculosis cases, 45 to cases of infective enteritis, 4,439 to cases of measles, 740 to cases of whooping cough, and 355 to nursing mothers and other cases.

The dental work in connection with maternity and child welfare is shown in the table on page 150, where it will be seen that 177 mothers and 538 young children were under treatment for dental conditions during 1933.

The main voluntary effort in connection with Maternity and Child Welfare in Bradford is undertaken by the Bradford Maternity Care Committee, which still continues its educational work among mothers attending various centres. Mothers are instructed in dressmaking, sewing, knitting, cookery and mothercraft by experienced teachers. There are five centres, namely, Wakefield Road, Otley Road, Lilycroft, Green Lane, and Fairweather Green. The total number of mothers registered at the classes is 240, with an average weekly attendance of 20.

During the year, 1,281 new garments were made at the classes, and over 268 garments were re-made from old clothes brought by the mothers. There was also a good proportion of garments knitted by the mothers. A maternity box is available for the use of the poorer members at the time of their confinement.

The Holiday Home at Grassington continues to be very successful, 118 mothers and 175 children having visited the Home. Out of that number, 14 paid for themselves, 31 were sent to the Home by the Health Committee, 54 by the Bradford Hospital and Convalescent Fund, 5 by the Guild of Help, and 14 by other organisations. Sixty-five children were sent by the Victoria Convalescent Fund.

Home Helps. During the year home helps have attended 35 cases, covering 441 days. Of these, 15 received the service free, 17 paid part cost, and 3 paid full cost.

ANTHRAX :

B. Anthracis was recovered from one human case.

Two hundred and thirty-three samples of wool, etc., were examined for the Government Wool Disinfecting Station at Liverpool. Of these 121 were of Raw Material and B. Anthracis was recovered from 17 of them. No evidence of infection by Anthrax was obtained from 112 samples of Disinfected Wool, etc.

Three out of 71 samples of wool, etc., from local sources were found to be infected with B. Anthracis.

Anthrax Summary:

Human	...	...	...	...	...	...	5
Wool, etc.—Local Samples	...	...	...	...	...	...	71
Liverpool Raw	...	...	...	...	...	...	121
Liverpool Disinfected	...	...	...	...	...	...	112
Shaving brushes	...	...	...	...	...	...	2
Biological tests	...	...	...	...	...	...	27
							<hr/> 338 <hr/>

INFECTIOUS DISEASES :

Enteric Fever. The number of specimens from cases of suspected Enteric fever fell from 1,060 in 1932 to 417 in 1933, with a corresponding fall in the number of cases established. Three cases of infection by B. typhosus and 7 of infection by B. paratyphosus B. were found.

Dysentery. Thirteen cases of bacilliary dysentery were established, 1 due to infection by Flexner's bacillus, 9 to infection by Sonne's bacillus and 3 by the Newcastle bacillus.

All were mild cases and probably represent but a small sample of the total number of cases occurring.

Undulant Fever. One case was found.

Venereal Diseases:

Dark ground examination for Spirochætes	...	83
Lange goldsol Reactions	... ..	22
Wassermann Reactions	... ..	4,624
Kahn tests	... ..	3,163
Smears, etc., for gonococci	... ..	2,057
		<hr/>
		9,949
		<hr/>

Infectious Diseases—Summary:

Cerebro-spinal fever	... ..	29
Diphtheria	... ..	7,423
Dysentery	... ..	129
Enteric fever	... ..	417
Erysipelas	... ..	1
Food poisoning	... ..	123
Malaria	... ..	1
Meningitis	... ..	88
Pneumonia	... ..	98
Puerperal fever	... ..	659
Scarlet fever	... ..	21
Tetanus	... ..	1
Tuberculosis—Cerebro-spinal fluids	... ..	44
Fæces	... ..	21
Fluids	... ..	46
Pus	... ..	70
Sputa	... ..	2,711
Urine	... ..	49
Biological tests	... ..	15
Undulant fever	... ..	81
Venereal diseases	... ..	9,949
Vincent's Angina	... ..	57
		<hr/>
		22,033
		<hr/>

FOOD :

Milk. Samples of milk and cream were examined from the following sources :—

City " street samples," source within the City	...	297
City " street samples," source outside the City	...	382
Certified	... ..	24
Grade " A "	... ..	73
Pasteurised	... ..	9
Heat treated	... ..	24
Sterilised	... ..	7
Cream	... ..	6
St. Luke's Hospital, A.T.T.	... ..	49
St. Luke's Hospital, Grade A	... ..	98
Other Institutions	... ..	123
Tinned Milk	... ..	4
Biological tests for B. tuberculosis	... ..	690
Biological tests for Br. abortus	... ..	17
Veterinary samples for B. tuberculosis	... ..	207
		2,010

Of these samples 1,091 were examined by the methods laid down in the Ministry of Health's memo. Foods/139. The following tables give a summary of the results obtained :—

CITY " STREET " SAMPLES OF RAW MILK, 1933.

Source	No. of Samples Examined	B. Coli absent from			
		1·0 cc.	0·1 cc.	0·01 cc.	0·001 cc.
Within the City... ..	297	51·18%	67·68%	81·82%	91·58%
Outside the City	382	35·17%	54·86%	78·74%	87·93%

Source	No. of Samples Examined	Organisms per c.c.		
		Less than 10,000	Less than 30,000	More than 200,000
Within the City	297	65·66%	86·87%	3·70%
Outside the City	382	58·53%	85·56%	4·19%

Percentage of samples of " street milks " reaching " Certified " standard (the highest standard of the Ministry of Health).

Source:

Within the City	...	...	...	67.68%
Outside the City	...	...	...	54.86%
Average all samples	...	...	...	60.38%

CITY " STREET " MILK SAMPLES.
Percentage passing " Certified " Standard.

Year	Within the City		Outside the City		All Samples	
	No.	Certified Standard	No.	Certified Standard	No.	Certified Standard
1928	290	66.56%	299	54.52%	589	60.62%
1929	241	70.12%	280	59.92%	521	64.11%
1930	262	66.02%	312	52.57%	574	60.61%
1931	316	76.54%	363	59.23%	679	67.16%
1932	334	66.22%	398	57.54%	732	63.66%
1933	297	67.68%	382	54.86%	679	60.38%
Total 6 yrs.	1,740	68.77%	2,034	56.35%	3,774	61.96%

The following table gives the results obtained from the examination of the samples of graded milk :—

" GRADED MILKS," 1933.

No. of Samples	Certified	A.T.T.	Grade A
	24	49	171
B. coli absent from 1.0 c.c. ...	95.83%	81.63%	69.00%
0.1 ...	95.83%	91.84%	81.29%
0.01 ...	95.83%	100.00%	89.47%
B. coli present in 0.01 ...	4.17%	0.0%	10.53%
Organisms per c.c. less than 10,000 ...	95.83%	91.84%	77.78%
30,000 ...	95.83%	95.92%	87.72%
200,000 ...	100.00%	100.00%	94.74%
Organisms per c.c. over 200,000...	0.0%	0.0%	5.26%
Pass the standard for the grade ...	95.83%	100.00%	89.47%

Taken as a whole these figures suggest that the standards set by the Ministry of Health are now too low, a milk containing no B. coli in 1 c.c. and less than 10,000 organisms per c.c. is readily obtainable.

ICE CREAM.

One hundred and forty-three samples of ice cream were examined ;

the results show a further falling off from those obtained in 1932. The absence of any standard of bacteriological purity is detrimental to both the Public Health and the Industry. About one half of our samples would pass a standard of no *B. coli* in 1 c.c. and less than 100,000 organisms per c.c., and most of the remaining manufacturers would reach this standard with a little further encouragement.

ICE CREAM.

Year	No. Exam.	B. coli absent from					Bacteria per c.c.				
		1-0 c.c.	0-1 c.c.	0-01 c.c.	0-001 c.c.	0-0001 c.c.	Less than 10,000	Less than 30,000	Less than 100,000	Less than 1 mill.	Over 1 mill.
1929	77	24-67%	51-92%	67-53%	79-22%	88-31%	2-59%	14-29%	20-78%	50-65%	49-35%
1930	75	36-93%	53-21%	64-0%	74-67%	78-67%	25-33%	34-67%	42-97%	76-0%	24-0%
1931	111	70-25%	84-69%	91-89%	95-49%	97-30%	34-23%	41-44%	55-86%	82-88%	17-12%
1932	122	46-72%	60-66%	71-31%	78-69%	90-16%	30-33%	45-9%	53-28%	77-05%	22-95%
1933	143	47-55%	58-74%	65-73%	76-22%	86-01%	30-07%	44-06%	60-84%	80-42%	19-58%
Average	528	46-21%	62-69%	73-29%	81-06%	88-64%	26-33%	38-26%	50-57%	75-19%	24-81%

WATER.

The following tables give the results obtained from the examination of the routine samples of water from the various sources of supply to the City:—

BRADFORD WATER—BARDEN MOOR.

Year	No. of Samples	Typical B. coli				
		Absent from 100 c.c.	Present in			
			100 c.c.	10 c.c.	1 c.c.	0-1 c.c.
1927	49	2-0%	98-0%	75-6%	10-3%	—
1928	46	8-8%	91-0%	33-3%	—	—
1929	70	62-85%	37-14%	1-43%	—	—
1930	98	75-51%	38-0%	5-1%	—	—
1931	176	46-59%	53-41%	7-38%	0-57%	—
1932	229	62-44%	23-14%	13-97%	0-44%	—
1933	143	90-91%	6-29%	2-10%	0-70%	—

NIDD VALLEY.

Year	No. of Samples	Typical B. coli				
		Absent from 100 c.c.	Present in			
			100 c.c.	10 c.c.	1-0 c.c.	0-1 c.c.
1928	202	—	100-0%	84-07%	15-6%	—
1929	38	47-82%	52-28%	4-36%	—	—
1930	50	88-0%	12-0%	—	—	—
1931	77	90-91%	9-09%	—	—	—
1932	77	89-41%	9-30%	1-29%	—	—
1933	124	88-71%	10-48%	0-81%	—	—

THORNTON MOOR AND STUBDEN.

1933	No. of Samples	Typical B. coli				
		Absent from 100 c.c.	100 c.c.	Present in		
				10 c.c.	1 c.c.	0·1 c.c.
Thornton Moor ...	10	6	3	1	—	—
Stubden	15	15	—	—	—	—

FOOD SUMMARY :

Milk	...	...	...	...	...	2,010
Water	...	...	...	...	...	422
Ice Cream	...	...	...	...	...	143
Lettuce	...	...	...	...	...	1
Shell-fish	...	...	...	...	...	920
Watercress	...	...	...	...	...	62
						<hr/> 3,558 <hr/>

CLINICAL SPECIMENS :

Asbestos bodies	...	...	...	...	2
Blood—Chemical Analyses :					
Albumen globulin ratio	...	...	...	...	6
Calcium	...	...	...	...	20
Carbon monoxide	...	...	...	...	2
Carbon dioxide combining power	...	...	...	...	1
Cholesterol	...	...	...	...	25
* Creatinine	...	...	...	...	17
Fouchet's test	...	...	...	...	23
Icteric index	...	...	...	...	3
Non-protein nitrogen	...	...	...	...	22
Phosphate	...	...	...	...	2
Plasma phosphatase	...	...	...	...	1
Sugar	...	...	...	...	87
Sugar tolerance curve	...	...	...	...	32
Total serum protein	...	...	...	...	16
Urea	...	...	...	...	556
Uric acid	...	...	...	...	1
Van den Bergh	...	...	...	...	24
Lævulose tolerance curve	...	...	...	...	3
Blood—Coagulation time	...	...	...	...	3

Counts complete	...	...	...	82
Cultures other than infectious diseases				27
Films for differential count	...	...		65
Fragility test	...	...	...	12
Body fluids	...	...	...	123
Fæces—Bacteriological	...	...	...	144
Chemical—Bile pigments	...	...		9
Blood	...	...	...	251
Fat	...	...	...	13
Lead	...	...	...	2
Parasites	...	...	...	10
Gastric Analyses	...	...	...	222
Hair for ringworm	...	...	...	42
Histological sections	...	...	...	615
Post-mortem examinations	...	...	...	127
Pus	...	...	...	393
Sputa	...	...	...	51
Urine	...	...	...	892
Urine—Chemical estimation	...	...	...	84
Vaccines	...	...	...	88
Wool sterility tests	...	...	...	233
Vaccine lymph for sterility	...	...	...	1
Maternity outfits for sterility	...	...	...	2

4,334

VII.—HOSPITAL ACCOMMODATION.

In the first portion of this report reference is made to the hospital accommodation of the City ; in this portion further details of the hospitals under the control of the Local Authority are given.

(A) MUNICIPAL GENERAL HOSPITAL.

REPORT BY HOLROYD SLATER, B.A., M.B., F.R.C.S., MEDICAL
SUPERINTENDENT.

I have the honour to present the thirteenth annual Report on the working of the Bradford Municipal General Hospital for the year ended December 31st, 1933.

General comparisons for the last ten years are shown in the following table :—

	...	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924
No. of Admissions	...	7994	7397	7078	6591	6915	7176	6707	6905	6565	6139
No. of Live Births	...	1039	923	826	789	702	654	539	592	485	466
No. of Operations	...	2693	2562	2257	2117	2158	2219	1973	2249	2018	1824
Average time in Hospital (in days)	...	32.08	34.1	34.8	37.2	35.6	34.5	29.9	30.4	28.7	31.4

Daily average number of in-patients throughout the year, 789

		Civic.	Public Assistance.	Pensioners.	Total.
No. of In-patients on Dec. 31st, 1932...		478	246	—	724
No. of Admissions during the year	...	6477	1511	6	7994
No. of live births during the year	...	1021	18	—	1039
					<hr/> 9757 <hr/>
No. of In-patients on Dec. 31st, 1933...		508	268	—	776
No. of Discharges and Deaths during the year	... ..	7468	1507	6	8981
					<hr/> 9757 <hr/>

The admissions were distributed through the Wards as follows :—

(The corresponding figures for 1932 are given in brackets.)

			Male.	Female.	Total.
Medical Wards	...	...	1314 (1234)	1073 (1096)	2387 (2330)
Surgical Wards	...	...	1330 (1220)	1910 (1712)	3240 (2932)
Children's Wards		...	430 (389)	424 (392)	854 (781)
Maternity Wards	...	...		1513 (1354)	1513 (1354)
Live Births	...	...	560 (467)	479 (456)	1039 (923)
			3634 (3310)	5399 (5010)	9033 (8320)

The admissions are shown in greater detail in the accompanying table.

TABLE SHOWING DISTRIBUTION OF ADMISSIONS THROUGH WARDS OF HOSPITAL AND MONTHS OF YEAR.

	Maternity Wards		Children's Wards		MEDICAL WARDS									SURGICAL WARDS				Transfers from Ward to	Total admissions into Wards	Total Admissions from outside		
	Ad-missions	Births	K1 & K2		H		Men				Women					Men					Women	
			A3	B	F1	F2	C3	D2	D3	E1	E2	E3	A1	A2	C1	C2						
1933																						
January	88	75	101	2	41	36	32	52	61	24	32	42	102	9	65	73	63	85	983	93	890	
February	74	65	47	10	43	28	32	27	56	18	34	23	48	5	48	29	56	40	683	44	639	
March	77	63	56	25	29	34	41	41	77	26	38	38	76	10	59	65	75	64	894	88	806	
April	100	84	54	17	39	29	21	40	44	22	27	41	95	5	54	37	41	37	787	100	687	
May	120	98	49	33	37	41	32	35	68	24	31	21	97	9	58	53	63	62	931	97	834	
June	112	101	60	—	25	27	23	20	67	34	10	24	114	4	66	55	65	66	873	123	750	
July	90	84	55	34	33	39	37	26	65	26	20	31	61	5	82	60	71	64	883	77	806	
August	109	93	39	12	24	22	34	20	58	28	13	21	75	5	29	44	21	46	693	55	638	
September	93	85	47	22	30	26	27	28	67	23	17	20	71	1	70	53	79	54	803	88	715	
October	106	88	69	17	38	27	36	33	69	21	19	32	69	3	62	56	63	70	878	81	797	
November	94	98	77	27	32	23	34	35	57	26	13	28	80	4	64	55	51	58	856	76	780	
December	110	105	46	4	43	27	26	38	46	25	23	20	86	1	43	50	37	55	785	94	691	
Total admissions into wards	1173	1039	700	203	414	359	375	395	735	297	277	341	974	61	700	630	685	701	10049	1016	9033	
Total Transfers, ward to ward..	292	—	38	11	21	116	2	10	39	14	16	45	190	52	20	60	40	50	1016	Total Transfers		
Total admissions from outside...	881	1039	662	192	393	243	373	385	696	283	261	296	784	9	680	570	645	651	9033	Total Admissions		

TABLE SHOWING DISEASES FROM WHICH PATIENTS HAVE SUFFERED.

DISEASE	Males		Females		T'tal	DISEASE	Males		Females		T'tal
	under 16	over 16	under 16	over 16			under 16	over 16	under 16	over 16	
ACUTE INFECTIOUS DISEASE:						MALIGNANT—continued.					
Cerebro-Spinal Meningitis ...	1	—	1	2	4	Uterus ...	—	—	—	76	76
Chicken Pox ...	13	—	15	—	28	Vulva ...	—	—	—	5	5
Diphtheria ...	15	—	—	3	26	Scrotum ...	—	2	—	—	2
Dysentery ...	1	—	2	1	4		—	108	—	185	293
Encephalitis Lethargica—Chronic ...	—	4	—	5	9	RHEUMATISM:					
Enteric Fever ...	1	1	1	1	4	Articular, Acute ...	5	12	4	17	38
Epidemic Enteritis ...	3	0	4	0	7	Articular, Subacute ...	—	17	1	29	47
Erysipelas ...	—	4	1	3	8	Chorea ...	1	—	18	2	21
Malaria ...	0	5	—	—	5	Non-Articular—					
Measles ...	12	—	6	1	19	Erythema Nodosum ...	—	—	—	1	1
Paratyphoid ...	—	—	1	—	1	Muscular ...	1	2	—	—	3
Pemphigus ...	—	—	1	—	1	Lumbago ...	—	8	—	3	11
Ringworm ...	2	—	1	—	3	Myalgia ...	—	—	—	1	1
Scarlet Fever ...	2	1	1	4	8	Sciatica ...	—	6	—	5	11
Tetanus ...	1	—	—	—	1	Chronic Arthritis ...	—	22	—	26	48
Whooping Cough ...	3	—	—	—	3		7	67	23	84	181
	54	15	42	20	131	VENEREAL DISEASE:					
INFLUENZA ...	5	43	5	53	106	Gonorrhœa ...	—	12	4	6	22
						Gonorrhœal Arthritis ...	—	1	—	—	1
TUBERCULOSIS:						Gonorrhœal Conjunctivitis ...	5	—	4	—	9
Pulmonary ...	—	40	—	19	59	Syphilis, Acquired ...	—	15	—	8	23
Non-Pulmonary—						Syphilis, Congenital ...	—	—	—	—	—
Ankle ...	1	—	—	1	2		5	28	8	14	55
Hip ...	4	4	4	3	15	VIOLENCE: ATTEMPTED					
Kidney ...	—	4	—	—	4	SUICIDE BY:					
Knee ...	—	—	—	1	1	Ammonia ...	—	—	—	2	2
Larynx ...	—	1	—	1	2	Carbolic Acid ...	—	—	—	1	1
Lymphatic Glands ...	3	4	1	2	10	Chlorodyne ...	—	—	—	2	2
Meninges ...	2	2	2	2	8	Cut Throat ...	—	8	—	4	12
Peritoneum ...	5	5	5	8	23	Dial ...	—	1	—	—	1
Phalanx ...	1	—	—	—	1	Drowning ...	—	1	—	—	1
Rib ...	—	1	—	—	1	Gas ...	—	13	—	8	21
Skin ...	—	1	—	1	2	Hanging ...	—	1	—	—	1
Spine ...	2	6	1	3	12	Hyposulphite of Soda ...	—	1	—	—	1
Testicle ...	—	1	—	—	1	Iodine ...	—	1	—	2	3
	18	69	13	41	141	Liniment ...	—	5	—	1	6
MALIGNANT DISEASE:						Oxalic Acid ...	—	—	—	1	1
Abdominal Wall ...	—	1	—	—	1	Quinine ...	—	—	—	1	1
Bladder ...	—	2	—	—	2	Wound of Abdomen ...	—	1	—	—	1
Breast ...	—	—	—	28	28	Wound of Wrist ...	—	1	—	—	1
Colon ...	—	11	—	9	20		—	33	—	22	55
Ileum ...	—	—	—	1	1	NERVOUS SYSTEM AND					
Larynx ...	—	1	—	—	1	SENSE ORGANS:					
Lip ...	—	3	—	1	4	Aphonia ...	—	1	—	—	1
Liver ...	—	1	—	3	4	Amblyopia ...	—	1	—	—	1
Lymphatic Glands ...	—	18	—	3	21	Amnesia ...	—	1	—	2	3
Lungs ...	—	2	—	—	2	Astigmatism ...	—	1	—	—	1
Mandible ...	—	2	—	2	4	Blepharitis ...	—	1	4	1	6
Maxilla ...	—	—	—	2	2	Cataract ...	—	4	1	7	12
Mediastinum ...	—	—	—	2	2	Cephalalgia ...	—	—	—	2	2
Œsophagus ...	—	2	—	1	3	Cerebral—					
Ovary ...	—	—	—	5	5	Abscess ...	—	1	—	—	1
Parotid ...	—	—	—	3	3	Concussion ...	—	3	1	4	10
Pancreas ...	—	3	—	3	6	Embolism ...	—	6	—	—	8
Penis ...	—	3	—	—	3	Hæmorrhage ...	—	49	—	47	96
Pharynx ...	—	6	—	1	7	Syphilis ...	—	—	—	—	—
Prostate ...	—	5	—	—	5	Thrombosis ...	—	4	—	10	14
Rectum ...	—	10	—	9	19	Tumour ...	—	4	—	3	7
Skin ...	—	5	—	6	11	Conjunctivitis ...	3	—	6	1	10
Spine ...	—	3	—	—	3	Convulsions ...	—	2	—	—	4
Stomach ...	—	22	—	21	43	Corneal Ulcer ...	—	1	—	3	5
Tibia ...	—	—	—	1	1	Dachryocystitis ...	—	1	—	—	2
Tongue ...	—	6	—	3	9	Deafness ...	—	—	—	1	1
						Deflected Septum Nasi ...	—	2	—	—	2
						Disseminated Sclerosis ...	—	9	—	5	14

TABLE SHOWING DISEASES FROM WHICH PATIENTS SUFFERED—*continued.*

DISEASE	Males		Females		T'tal	DISEASE	Males		Females		T'tal
	under 16	over 16	under 16	over 16			under 16	over 16	under 16	over 16	
NERVOUS SYSTEM AND SENSE ORGANS— <i>cont.</i>						RESPIRATORY SYSTEM:— <i>continued.</i>					
Epilepsy ...	1	38	—	18	57	Hodgkin's Disease ...	—	2	—	—	2
Epilepsy Jacksonian ...	—	—	1	—	1	Hyperpiesis ...	—	4	—	2	6
Epiphora ...	2	—	—	—	3	Hypoglycaemia ...	—	1	—	—	1
Erb's Paralysis ...	1	—	1	—	2	Leukemia ...	—	—	—	1	1
Friedreich's Disease ...	—	—	—	1	1	Morbus Cordis ...	5	136	5	122	268
G.P.I. ...	—	2	—	—	2	Phlebitis ...	—	2	—	2	4
Glaucoma ...	—	1	—	3	4	Purpura ...	—	2	—	—	2
Hemiplegia ...	2	28	—	26	56	Raynaud's Disease ...	—	—	—	1	1
Hydrocephalus ...	2	—	—	—	2	Varicose Veins ...	—	10	—	7	17
Herpes Zoster...	—	—	—	5	5						
Hysteria ...	—	1	—	6	7		5	195	10	178	388
Iritis ...	—	1	—	2	3	DIGESTIVE SYSTEM:					
Keratitis ...	1	1	1	2	5	Achlorhydria ...	—	1	—	1	2
Locomotor Ataxy ...	—	8	—	3	11	Acidosis ...	—	—	2	—	2
Mastoiditis ...	15	4	10	12	41	Alveolar Abscess ...	—	2	—	—	2
Meniere's Disease ...	—	4	—	1	5	Appendicitis, Acute ...	19	51	10	53	133
Meningitis, Acute ...	—	3	1	1	5	Appendicitis, Chronic ...	24	85	23	123	255
Meningitis, ...	—	—	—	—	—	Cholecystitis ...	—	10	—	29	39
Pneumococcal ...	—	2	—	—	2	Cirrhosis of Liver ...	—	7	—	3	10
Meningocele ...	1	—	—	—	1	Colic—Intestinal ...	5	26	1	29	61
Migraine ...	—	1	—	—	1	Colitis, Mucous ...	—	5	1	2	8
Monoplegia ...	—	—	—	2	2	Colitis, Ulcerative ...	—	1	—	—	1
Nasal Polypi ...	—	3	—	—	3	Colostomy ...	—	—	—	1	2
Neuralgia ...	—	1	—	1	2	Constipation ...	3	26	3	29	61
Neuralgia, Trigeminal ...	—	4	—	4	8	Dental Caries...	1	5	2	8	16
Neurasthenia ...	—	30	—	44	74	Dental Cyst ...	1	—	—	—	1
Neuritis-Peripheral ...	—	13	—	4	17	Diarrhoea ...	2	6	3	4	15
Panophthalmitis ...	—	1	—	—	1	Diverticulum of ...	—	—	—	—	—
Paralysis Agitans ...	—	1	—	4	5	Duodenum ...	—	1	—	—	1
Paralysis, Infantile ...	3	1	2	—	6	Diverticulosis of Colon ...	—	2	—	—	2
Paraplegia, Spastic ...	2	11	—	6	19	Diverticulosis of ...	—	—	—	—	—
Poliomyelitis ...	—	—	1	—	1	Oesophagus ...	—	1	—	—	1
Progressive Muscular ...	—	—	—	—	—	Duodenal Ulcer ...	—	89	—	11	100
Atrophy ...	—	1	—	—	1	Duodenal Ulcer, Perforated ...	—	24	—	—	24
Strabismus ...	14	3	13	2	32	Dyspepsia ...	—	18	—	4	22
Sunstroke ...	—	2	—	—	2	Dysphagia ...	—	1	1	—	2
Vertigo ...	—	5	—	1	6	Enteritis ...	7	—	8	5	20
Paralysis of Palate (Post Diphtheria) ...	—	1	—	—	1	Fissure, Anal ...	1	6	1	7	15
	53	260	45	236	594	Fistula in Ano ...	—	3	—	1	4
RESPIRATORY SYSTEM:						Fistula, Biliary ...	—	2	—	—	2
Abscess of Lung ...	—	1	1	—	2	Foreign Body in Bowel ...	—	1	—	—	1
Atelectasis ...	1	—	—	—	1	Foreign Body in Oesophagus ...	—	1	—	—	1
Bronchial Asthma ...	2	21	—	21	44	Foreign Body in Stomach ...	4	1	1	1	7
Bronchiectasis ...	—	2	—	2	4	Gall Stones ...	—	7	1	48	56
Bronchitis, Acute ...	28	25	28	10	91	Gastric Ulcer ...	—	23	—	14	37
Bronchitis, Chronic ...	—	175	1	71	247	Gastric Ulcer, Perforated ...	—	3	—	2	5
Broncho-Pneumonia ...	36	24	38	11	109	Gastritis ...	2	32	4	31	69
Coryza ...	—	8	—	2	10	Gastric Tetany ...	—	1	—	—	1
Empyema ...	5	7	—	3	15	Gastro-Enteritis ...	20	8	8	4	40
Hæmoptysis ...	—	2	—	2	4	Gastroptosis ...	—	—	—	3	3
Laryngitis ...	—	3	1	3	7	Hæmatemesis... ..	—	22	—	9	31
Pleurisy, Plastic ...	1	30	2	14	47	Hæmorrhoids ...	—	38	—	18	56
Pleurisy with Effusion ...	3	7	—	5	15	Hyperchlorhydria ...	—	4	—	—	4
Pneumonia, Lobar ...	35	78	19	49	181	Intestinal Obstruction, acute ...	—	4	—	4	8
Pneumonia Hypostatic ...	—	2	—	1	3	Intestinal Obstruction, chronic ...	—	2	—	1	3
Pulmonary Embolism ...	—	—	—	1	1	Intussusception ...	—	—	1	—	1
Pneumothorax ...	—	1	—	—	1	Ischio—Rectal Abscess ...	—	22	—	8	30
Rhinitis ...	2	—	2	1	5	Jaundice, Arsenical ...	—	1	—	—	1
Silicosis ...	—	1	—	—	1	Jaundice—catarrhal ...	1	9	1	6	17
	113	387	92	196	788	Marasmus ...	21	—	10	—	31
CIRCULATORY SYSTEM:						Melæna ...	—	—	—	5	5
Achloric Jaundice ...	—	—	—	1	1	Pancreatitis ...	—	1	—	2	3
Anæmia, Pernicious ...	—	7	—	5	12	Peritonitis, Acute ...	—	2	—	—	2
Anæmia, Simple ...	—	7	5	18	30	Peritoneal Adhesions ...	—	7	—	4	11
Anæmia, Splenic ...	—	1	—	1	2	Pink Disease ...	—	—	1	—	1
Aneurysm—						Prolapse of Rectum ...	5	2	—	3	10
Aortic ...	—	1	—	1	2	Ptomaine Poisoning ...	1	—	2	1	4
Subclavian ...	—	1	—	—	1	Pyloric Stenosis ...	1	2	2	1	6
Arterio-Sclerosis ...	—	7	—	9	16						
Gangrene, Diabetic ...	—	3	—	4	7						
Gangrene, Senile ...	—	11	—	4	15						

TABLE SHOWING DISEASES FROM WHICH PATIENTS SUFFERED—*continued.*

DISEASE	Males		Females		T'tal	DISEASE	Males		Females		T'tal
	under 16	over 16	under 16	over 16			under 16	over 16			
DIGESTIVE SYSTEM— <i>continued</i>						GENITO-URINARY SYSTEM— <i>continued.</i>					
Pyorrhœa Alveolaris...	—	1	—	2	3	Pyonephritis ...	—	—	—	1	1
Polypus—Rectum ...	—	1	—	—	1	Pyosalpinx ...	—	—	—	4	4
Retropharyngeal	—	—	1	—	1	Renal Colic ...	1	18	—	11	30
Abscess ...	—	—	1	—	1	Renal Tumour ...	—	—	—	2	2
Ruptured Gall Bladder	—	1	—	—	1	Retroverted Uterus ...	—	—	—	38	38
Stomatitis ...	2	—	2	—	4	Ruptured Perineum ...	—	—	—	7	7
Strangulation of Band	—	1	—	—	1	Salpingitis ...	—	—	—	40	40
Stricture of Œsophagus	—	1	—	—	1	Scrotal Abscess ...	—	1	—	—	1
Stricture of Rectum...	—	—	—	2	2	Stenosis Vagina ...	—	—	—	2	2
Tape Worm ...	—	1	—	—	1	Sterility ...	—	—	—	10	10
Thread Worms ...	1	—	—	—	1	Stone in—	—	—	—	—	—
Thrombosis Mesenteric	—	—	—	—	—	Bladder ...	—	2	—	—	2
Vessels. ...	—	—	—	1	1	Kidney ...	1	5	—	7	13
Ulcer of Tongue ...	1	1	—	—	2	Ureter ...	—	3	—	—	3
Unrupted Molar ...	—	—	—	1	1	Stricture of Urethra...	—	12	—	—	12
Visceroptosis ...	—	1	—	11	12	Undescended Testicle	9	3	—	—	12
	122	574	90	492	1278	Vaginal Stenosis ...	—	—	—	—	—
GENITO-URINARY SYSTEM:						Vaginitis ...	—	—	—	9	9
Amenorrhœa ...	—	—	—	4	4	Varicocele ...	—	8	—	—	8
Bacilluria ...	—	—	1	3	4	Vulvitis ...	—	—	2	2	4
Bartholin's Cyst ...	—	—	—	5	5		61	219	5	612	897
Caruncle, Urethral ...	—	—	—	11	11	SKIN:					
Cervical Erosion ...	—	—	—	8	8	Bedsore ...	—	2	—	—	2
Cystitis ...	—	6	—	13	19	Boils ...	1	5	1	3	10
Cystocele ...	—	—	—	10	10	Callosities ...	—	3	—	—	3
Cyst of Epididymis ...	—	1	—	—	1	Carbuncle ...	—	12	—	2	14
Dysmenorrhœa ...	—	—	—	20	20	Dermatitis—acute ...	—	—	—	4	4
Dyspareunia ...	—	—	—	3	3	Dermatitis—chronic ...	1	19	—	6	26
Dysuria ...	—	4	—	—	4	Dermoid Cyst... ..	—	1	—	—	1
Endometritis ...	—	—	—	27	27	Eczema ...	3	18	2	6	29
Enuresis ...	—	—	—	3	3	Elephantiasis...	—	—	—	1	1
Extraversion of	—	—	—	—	—	Herpes ...	—	—	1	—	1
Bladder ...	1	—	—	—	1	Impetigo ...	12	12	19	1	44
Fallopian Tube,	—	—	—	—	—	Keloid ...	2	—	—	4	6
Torsion ...	—	—	—	2	2	Lichen Planus ...	—	—	1	—	1
Fibroids Uterus ...	—	—	—	51	51	Nævus ...	—	1	2	—	3
Fistula, Recto-Vaginal	—	—	—	1	1	Onychia ...	—	1	—	5	6
Fistula, Urethral ...	—	2	—	—	2	Papillomata ...	—	1	1	1	3
Fistula, Vesico ...	—	1	—	—	1	Pediculosis ...	—	1	1	—	2
Hæmatoma, Vulva ...	—	—	—	1	1	Psoriasis ...	—	6	1	4	11
Hæmaturia ...	—	15	—	6	21	Pruritis Ani ...	—	1	—	—	1
Hydrocele ...	2	14	—	—	16	Scabies ...	1	6	—	3	10
Hydrocele, Canal of	—	—	—	—	—	Sebaceous Cyst ...	—	5	—	4	9
Nuck ...	—	—	—	1	1	Seborrhœa ...	—	1	—	1	2
Hydronephrosis ...	—	1	—	1	2	Ulcer of Leg ...	—	19	1	18	38
Hypertrophied Cervix	—	—	—	1	1	Ulcers of Lip ...	—	—	—	1	1
Hypospadias ...	4	—	—	—	4	Urticaria ...	—	—	—	1	1
Leucorrhœa ...	—	—	—	48	48	X-Ray Dermatitis ...	—	—	—	1	1
Imperforate Hymen...	—	—	—	1	1		20	114	30	66	230
Menorrhagia ...	—	—	—	37	37	OTHER DISEASES:					
Metrorrhagia ...	—	—	—	62	62	Abscesses ...	11	22	2	17	52
Movable Kidney ...	—	—	—	2	2	Adenitis—simple ...	11	9	16	3	39
Nephritis, Acute ...	4	4	1	6	15	Adenitis—suppurating	9	4	9	1	23
Nephritis, Chronic ...	1	32	1	30	64	Adenoids and Tonsils	37	1	21	14	73
Orchitis ...	—	7	—	—	7	Adenoma of Breast ...	—	—	—	14	14
Oxaluria ...	—	2	—	—	2	Alcoholism ...	—	6	—	1	7
Ovarian Cyst ...	—	—	—	30	30	Arthritis, Acute ...	—	1	—	—	1
Ovaritis ...	—	—	—	1	1	Ankylosis, Hip ...	—	—	1	—	1
Papilloma of Bladder	—	1	—	1	2	Ankylosis, Knee ...	1	—	—	—	2
Par ametritis ...	—	—	—	4	4	Baker's Cyst of Knee...	1	1	—	—	2
Paraphimosis ...	2	3	—	—	5	Bruises, etc. ...	6	27	4	22	59
Pelvic Cellulitis ...	—	—	—	10	10	Burns and Scalds ...	7	3	3	12	25
Perinephric Abscess ...	—	—	—	1	1	Bursitis ...	1	2	—	1	4
Periurethral Abscess...	—	4	—	—	4	Bursitis—suppurating	—	1	—	2	3
Phimosis ...	36	8	—	—	44	Cellulitis ...	9	47	8	28	92
Prolapse Uterus ...	—	—	—	58	58	Charcot's Joint ...	—	4	—	—	4
Prolapse of Ovary ...	—	—	—	—	—	Cleft Palate ...	1	—	—	—	1
Prostatic Enlargement	—	59	—	—	59	Contracted Knee ...	1	—	—	—	1
Pruritis Vulvæ ...	—	—	—	2	2	Cyst of Neck ...	—	1	—	—	1
Pyelitis ...	—	3	—	15	18						

TABLE SHOWING DISEASES FROM WHICH PATIENTS SUFFERED—*continued.*

DISEASE	Males		Females		T'ta	DISEASE	Males		Females		T'ta
	under 16	over 16	under 16	over 16			under 16	over 16	under 16	over 16	
OTHER DISEASES— <i>cont.</i>						Femoral	—	2	—	8	10
Debility	—	42	—	37	79	Inguinal	9	87	2	19	117
Dermoid Cyst... ..	—	—	—	2	2	Umbilical	7	2	6	3	18
Diabetes Mellitus	—	22	—	32	54	Ventral	—	10	—	6	16
Dislocation of Coccyx	—	—	—	1	1	Hernia Strangulated:	—	—	—	—	—
Humerus	—	4	—	3	7	Femoral	—	—	—	6	6
Hip	—	—	—	—	—	Inguinal	1	9	—	1	11
Hip Congenital	—	—	7	—	7	Ventral	—	—	—	1	1
Elbow	1	2	—	2	5	Hydatid Cyst,	—	—	—	—	—
Radius	—	1	—	—	1	Broad Ligament	—	—	—	1	1
Semilunar Cartilage	—	—	—	—	—	Hyperthyroidism	—	—	—	1	1
of Knee	—	11	—	—	11	Lipoma	—	1	—	3	4
Dupuytren's Contraction	—	2	—	—	2	Malingering	—	3	—	1	4
Epistaxis	1	4	—	2	7	Mastitis	—	—	—	1	1
Epulis	—	2	—	2	4	Myxoedema	—	—	—	1	1
Exophthalmic Goitre	—	1	—	1	2	Necrosis of Bone	1	3	—	3	7
Exostosis	—	—	—	1	1	Osteoma	—	1	1	—	2
Foreign bodies in:	—	—	—	—	—	Osteomyelitis, acute	2	—	1	—	3
Eye	—	—	—	—	—	Osteomyelitis, chronic	1	6	—	2	9
Foot	—	—	—	1	1	Periostitis	—	5	—	—	5
Leg	—	1	—	—	1	Pharyngitis	—	—	—	4	4
Knee	—	—	—	1	1	Perthe's Disease	3	—	—	—	3
Fracture of:	—	—	—	—	—	Pes Cavus	1	—	—	—	1
Clavicle	—	—	—	1	1	Polydactylism	—	—	1	—	1
Femur	4	8	—	11	23	Prematurity	1	—	—	—	1
Fibula	—	8	—	1	9	Rickets	5	—	3	—	8
Fibula and Tibia	—	1	—	15	16	Ruptured Quadriceps	—	—	—	—	—
Humerus	3	1	—	4	8	Extensor	—	—	—	1	1
Metatarsal	—	1	—	—	1	Sacro-coccygeal Tumor	—	—	—	1	1
Patella	—	2	—	4	6	Sinus	—	4	1	—	5
Pelvis	—	—	—	1	1	Scoliosis	—	—	2	—	2
Radius and Ulna	2	4	1	3	10	Septicæmia	—	2	1	—	3
Ribs	—	8	—	2	10	Sores on Penis,	—	1	—	—	1
Sacrum	—	1	—	—	1	Non-specific	—	—	—	—	—
Scapula	—	1	—	—	1	Sprains of Joints	5	15	2	8	30
Skull	1	1	1	—	3	Still's Disease	1	—	—	—	1
Tibia	—	3	2	4	9	Synovitis	1	2	—	2	5
Ganglion	1	—	—	1	2	Talipes Valgus	—	—	1	—	1
Genu Valgum	1	1	2	—	4	Talipes Varus	5	1	2	—	8
Genu Varum	1	—	—	—	1	Tonsillitis	4	9	—	30	43
Goitre	—	1	—	1	2	Torticollis	1	—	2	1	4
Hallux Valgus	—	3	—	3	6	Vertigo	—	1	—	—	1
Hammer Toe	—	5	—	2	7	Wounds	3	7	—	3	13
Hernia:	—	—	—	—	—	Wound of Tongue	1	—	—	—	1
Diaphragmatic	—	—	—	5	5		162	441	102	363	1068

DISEASES AND ACCIDENTS CONNECTED WITH CHILDBEARING

Abortion	179	Pleurisy	2
Albuminuria	46	Pneumonia, Lobar	3
Ante Partum Hæmorrhage	8	Post Partum Hæmorrhage	3
Appendicitis	1	Pruritus	1
Bronchitis, acute	1	Pulmonary Tuberculosis	1
Chorea	3	Pyelitis	9
Contracted Pelvis or Disproportion	30	Puerperal Pyrexia	35
Cystitis	2	Puerperal Fever	17
Diabetes	1	Retained Placenta	2
Debility	13	Retroverted Gravid Uterus	4
Epilepsy	2	Rheumatism, Sub-acute	1
Gastritis	1	Ruptured Perineum	2
Hæmorrhoids	1	Ruptured Tubal Gestation	4
Hydramnios	3	Streptococcal Infection, Throat	1
Hydatid Mole	2	Subinvolution	4
Hyperemesis	24	Tetany	1
Jaundice	2	Toxæmia	18
Mania	1	Varicose Veins	3
Mastitis, Acute	1	Ventral Hernia	1
Miscarriage	34		
Miscarriage (threatened)	6		
Morbus Cordis	11		489

SURGICAL DEPARTMENT.

The number of operations performed during 1933 was 2,693, as compared with 2,562 last year. The operation death rate was 3.08 per cent. as against 4.1 per cent. in 1932.

The various forms of anæsthesia employed and the number of operations performed under each are shown in the following table:—

	Laparotomies	Other Operations	Total
Spinal—(Stovaine or Spinocaine)	371	346	717
Spinal—Avertin	26	7	33
Avertin—Open Ether	100	99	199
Avertin—Gas and Oxygen	13	2	15
Avertin—Local —	2	11	13
Rectal Ether	—	8	8
Evipan—intravenous	—	4	4
Local Infiltration (Novocaine and Cocaine)... ..	12	139	151
General (Ether, Chloroform, Gas)	337	1,216	1,553
Totals	861	1,832	2,693

Nature of Operation	Recovered	Died	Nature of Operation	Recovered	Died
LAPAROTOMIES:			SMALL INTESTINES—continued.		
Exploratory	24	3	For Jejunostomy for Gastric Ulcer	1	1
For Drainage Tube in Pelvis	1	—	LIVER:		
For Diverticulitis	2	—	Cholecystectomy	29	2
For General Peritonitis	1	3	Cholecystostomy	18	1
For Intestinal Adhesions	4	1	For Ruptured Gall Bladder	—	1
For Pelvic Abscess	2	—	UTERUS AND APPENDAGES:		
For Self Inflicted Wounds of Bowel	—	1	Cæsarian Section for Acute Toxæmia	0	1
Tuberculous Peritonitis	2	—	Cæsarian Section for Contracted Pelvis	33	—
Resuture of Abdominal wound	3	—	Cæsarian Section for Failed Forceps	1	—
HERNIE:			Cæsarian Section for Mitral Stenosis	1	—
Radical Cure—umbilical	17	—	Cæsarian Section for Placent Prævia	1	—
Radical Cure—umbilical, strangulated	1	—	Cæsarian Section for Peritoneal Adhesions	1	—
Radical Cure—ventral	6	1	Cæsarian Section for Post Maturity	3	—
Radical Cure—Diaphragmatic Hernia	1	1	Cæsarian Section for Transverse Lie	1	—
STOMACH:			Hysterectomy—Total	16	—
Gastrectomy, for Gastric Ulcer	8	2	Hysterectomy—Sub-Total	42	2
Gastrojejunostomy Posterior for Duodenal Ulcer	40	3	Hysterotomy	1	—
Gastrojejunostomy Posterior for Pyloric Stenosis	—	1	Myomectomy	1	1
Gastrojejunostomy Posterior for Gastric Ulcer	9	1	Oophorectomy and Salpingectomy	28	—
Gastrojejunostomy Posterior for Gastric Cancer	—	1	Ovariectomy	26	1
Gastrostomy	—	1	Pyosalpinx Drained	1	—
Gastrostomy—Removal of Iron Nail	1	—	Ruptured Ectopic Gestation	7	—
For Perforation of Duodenal Ulcer... ..	19	5	Ventrofixation of Uterus	26	—
For Perforation of Gastric Ulcer... ..	4	1	TOTAL LAPAROTOMIES	808	56
Splenectomy	1	—	HERNIOTOMIES:		
LARGE INTESTINES:			Radical Cure—Femoral Hernia	10	1
Cæcotomy	4	—	Radical Cure—Inguinal Hernia	112	—
Colostomy	6	—	For Strangulated Femoral Hernia	5	—
Colo-Colostomy (for Cancer)	1	—	For Strangulated Inguinal Hernia	6	—
Ileo-colostomy (for cancer)	2	—	TOTAL HERNIOTOMIES	133	1
Resection Carcinoma Coli	1	—	GENITO-URINARY		
APPENDIX:			Amputation of Penis	2	—
Appendicectomy, acute	121	12	Circumcision	54	1
Appendicectomy, Chronic	278	1	Colporrhaphy	6	—
Appendix Abscess—drained	6	2	Craniotomy	1	—
Appendicectomy—for carcinoma	1	—	Curettage... ..	204	1
Appendicectomy—for TB. Colitis	—	1	Cystoscopy, Ureteral Catheterisation	32	1
SMALL INTESTINES:			Cystotomy, Supra Pubic	26	1
For acute obstruction by Adhesions or Bands	1	2	Decapsulation, Kidney	2	—
For Intussusception, Reduction	2	—	Embryotomy	1	—
For Enterointerostomy	2	—	Forceps Delivery	34	—
			Hysterectomy, Vaginal	1	—

SURGICAL DEPARTMENT—*continued.*

Nature of Operation	Recovered	Died	Nature of Operation	Recovered	Died
GENITO-URINARY—<i>continued.</i>			NOSE THROAT AND CHEST—<i>continued.</i>		
Induction of Premature Labour ...	9	—	Mastoidectomy—Conservative... ..	10	1
Nephrectomy	3	—	Oesophagoscopy	2	—
Nephrolithotomy	3	—	Plastic Operation on Nose	1	—
Nephropexy	1	—	Resection—Septum Nasi	3	—
Orchidectomy	5	—	Tracheotomy	1	—
Pelvic Examination	28	—	Turbineotomy	1	—
Perineorrhaphy	64	—	For Carcinoma of Tongue—Radium ...	5	—
Podalic Version	1	—	For Carcinoma of Cheek—Radium ...	3	—
Prostatectomy—Supra Pubic	9	1	For Carcinoma of Maxilla	2	—
Radical Cure—Hydrocele	16	—	For Cleft Palate	2	—
Radical Cure—Varicocele	7	—	For Cut Throat	6	—
Removal of Pessary	1	—	For Empyema—Chest—Drainage, etc.	9	—
Resection of Cervix Uteri	5	—	For Empyema—Antrum—Highmore ...	4	—
Steinach's Operation	1	—	For Foreign Body in Nostril	1	—
Urethrotomy, Internal	1	—	For Foreign Body in Oesophagus ...	2	—
For Ante Partum Hæmorrhage ...	2	—	For Hare Lip	1	—
For Bartholin Cyst	3	—	For Aural Polypi	1	—
For Carcinoma Penis—Radium	1	—	For Nasal Polypi	8	—
For Carcinoma of Cervix Uteri			For Sarcoma, Mandible—Diathermy ...	1	—
Curetting	2	—	For Sarcoma, Nose—Radium	1	—
For Carcinoma of Cervix Uteri			For Lupus—Nasal Cavity	1	—
Radium	46	—	For Tonsils and Adenoids	104	—
For Carcinoma of Prostate—Radon ...	1	1	For Torticollis	5	—
For Epithelioma, Vulvæ—Excision ...	1	—	Total	186	2
For Epithelioma, Scrotum	1	—	EYES:		
For Hæmatoma, Labia	1	—	Excision—Lachrymal Sac	4	—
For Hypospadias	6	—	Iridectomy	6	—
For Paraphimosis	1	—	For Cataract	11	—
For Papilloma of Bladder	1	—	For Corneal Ulcer	5	—
For Papilloma of Vulvæ	2	—	For Dystriehiasis	4	—
For Pelvic Abscess	1	—	For Entropion	1	—
For Perineal Abscess	3	—	For Evisceration—Eyeball	4	—
For Perinephric Abscess	1	—	For Epiphora	1	—
For Polypus Cervix	12	—	For Meibomian Cyst	3	—
For Retained Products of Conception	105	1	For Ophthalmia Neonatorum	1	—
For Scrotal Tumour	1	—	For Squint	34	—
For Scrotal Abscess	1	—	Total	74	—
For Stenosis Vagina	2	—	EXCISIONS:		
For Undescended Testicle	11	—	Adenoma of Breast	11	—
For Urethral Calculus	5	—	Bursa, Olecranon	1	—
For Urethral Caruncle	5	—	Callosity, Sole	1	—
For Urethral Stricture—Dilatation ...	22	1	Dentigerous Cyst	2	—
For Urethral Stricture—Wheelhouse			Dermoid of Skin... ..	1	—
Operation	1	—	Epuilis	2	—
For Urethral Fistula	3	—	Fibroma	1	—
For Vaginal Cysts	2	—	Foreign Bodies	1	—
For Vaginismus	1	—	Galactoele	2	—
For Vesical Calculus	1	—	Ganglion	2	—
Imperforate Vagina	1	—	Glands, Lymphatic, Malignant ...	7	—
Wound of Vagina	1	—	Glands, Lymphatic, Tuberculous ...	19	1
Total	764	8	Lipoma	6	—
RECTUM:			Nævus	5	—
Sigmoidoscopy	11	—	Nipple, Paget's Disease of	2	—
Resection—Carcinoma Rectum	1	—	Papilloma	2	—
For Carcinoma—Radium	3	—	Parotid Tumour	1	—
For Fissure—Anal	12	—	Prepatellar Bursa	2	—
For Fistula—Anal	11	—	Rodent Ulcer	2	1
For Ischio-Rectal Abscess	15	1	Sacrococcygeal Cyst	1	—
For Polypus	3	—	Scar	4	—
For Piles	42	—	Sebaceous Cyst	9	—
For Prolapse	5	—	Total	84	2
For Pruritus Ani	2	—	AMPUTATIONS:		
For Stricture	1	—	Arm	2	—
Total	106	1	Breast, Cancer	12	1
NOSE, THROAT AND CHEST:			Finger	6	—
Cauterisation—Nasal Mucous Membrane	1	—	Leg	2	—
Intubation—Larynx	1	—			
Mastoidectomy—Radical	10	1			

SURGICAL DEPARTMENT—*continued.*

Nature of Operation.	Recovered	Died	Nature of Operation.	Recovered	Died
AMPUTATIONS—<i>continued.</i>			MISCELLANEOUS:		
Thigh	3	3	Abscesses	54	—
Toe	3	—	Avulsion of Nail	9	—
Total	28	4	Blood Transfusion	1	2
BONES AND JOINTS:			Burns, Extensive	1	—
Coccygectomy	1	—	Carbuncle	7	3
Excision, Baker's Cyst	1	—	Carcinoma, Abdominal Wall—Radium	1	—
Exploration, Knee Joint	1	—	Carcinoma, Breast—Radium	3	—
Forcible Movements of Joints	9	—	Carcinoma, Glands of Neck—Radium	2	—
Osteoclasy	3	—	Carcinoma, Tongue—Radium	1	—
Pegging, Plating and Wiring Fractures	9	—	Cellulitis	31	1
Reduction of Fractures	17	—	Chronic Ulcer	2	—
Reduction of Dislocation of Hip (Con-	5	—	Dental Extractions	124	—
genital)	5	—	Dupuytren's Contraction	2	—
Reduction of Dislocation of Shoulder...	3	—	Erb's Palsy	1	—
Reduction of Dislocation of Elbow	2	—	Fibrolysin, for X-Ray Necrosis	1	—
Resection of Exostosis	2	—	Foreign Bodies in Tissues	1	—
Resection of Semilunar Cartilage of Knee	10	—	Gasserian Ganglion Injection—Alcohol	1	—
Sequestrotomy	9	—	Ligature of Common Carotid	1	—
Trephining Cerebral Tumour	1	1	Lumbar Puncture	1	—
For Arthritis, Septic	2	—	Lupus—Diatbermy or Radium	8	—
For Hallux Valgus	4	—	Mammary Abscess	15	—
For Hallux Rigidus	2	—	Nævus, CO ₂ Snow	1	—
For Necrosis Mandible	2	—	Plastic Operation on Forehead	1	—
For Necrosis Tibia	1	—	Primary Suture of Wounds	9	—
For Necrosis Olecranon... ..	1	—	Secondary Suture of Wounds	1	—
For Necrosis Phalanx	2	—	Rodent Ulcer—Diatbermy	1	—
Osteotomy	3	—	Sinus	2	—
For Tuberculosis Ankle... ..	2	—	Skin Graft	8	—
For Tuberculosis Knee	3	—	Stretching Sciatic Nerve	2	—
For Tuberculosis Spine	2	—	Sympathectomy	4	—
For Osteomyelitis, Acute	1	2	Tendon Transplantation	2	—
For Osteomyelitis, Chronic	2	—	Tenotomy	9	—
For Pes Cavus	4	—	Trigeminal Neuralgia	1	—
For Psoas Abscess	1	—	Varicose Veins—Injection	6	—
For Talipes Equinus	6	—	Total Miscellaneous... ..	427	9
			Total Operations	2610	83

MATERNITY DEPARTMENT.

The attendances at the Hospital Ante-Natal Clinic numbered :—

New Patients	...	...	...	...	...	1285
Others	...	...	...	...	...	4593
Total						5878

In the Maternity Wards there were 1,039 live births and 74 stillbirths. The proportion of stillbirths was 6·6%, as compared with 7·9% last year and 8·1% in 1931.

There were 15 Maternal Deaths.

Cæsarian Section was performed on 42 occasions for the following conditions :—

Acute Toxæmia	...	...	...	...	...	1
Contracted Pelvis	...	...	...	...	...	33
Failed Forceps	...	...	...	...	...	1
Mitral Stenosis	...	...	...	...	...	1
Placenta Prævia	...	...	...	...	...	1
Peritoneal Adhesions	...	...	...	...	...	1
Post-maturity	...	...	...	...	...	3
Transverse Lie	...	...	...	...	...	1
						42

ABNORMALITIES IN LABOUR.

Cause.	Number.
<i>Perineal Lacerations—</i>	
Forceps	28
Episiotomy	7
Spontaneous	124
<i>Contracted Pelvis—</i>	
Cæsarian Section	33
Premature Induction	14
<i>Forceps Cases—</i>	
After Coming Head	1
Brow Presentation	1
Delayed Descent	2
Eclampsia	3
Face Presentation	1
Failed Forceps at Home	2
Fœtal Distress	4
Maternal Distress	6
Morbus Cordis	1
Occipito Post. Position	2
Paraplegia	1
Prolonged Second Stage	11
Transverse Lie	1
Uterine Inertia	9
<i>Abnormalities of Mother—</i>	
Hydramnios	5
Uterine Fibroids	3
Retained Placenta	4
Secondary Uterine Inertia (forceps)	9
<i>Abnormal Presentations—</i>	
Breech	10
Brow	1
Face	4
Transverse	2
Prolapsed Cord	3

Cause.	Number.
<i>Diseases of Mother—</i>	
Bronchitis, Acute	1
Bacilluria	1
Diabetes	1
Erysipelas	1
Heart Disease	18
Inoperable Carcinoma of Uterus	—
Influenza	3
Ovarian Cyst	1
Puerperal Mania	3
Pleurisy	1
Pneumonia	2
Phthisis	1
Phlebitis	3
Rheumatism, Acute	1
Veneral Disease	16
Scarlet Fever	1
<i>Toxæmias—</i>	
Albuminuria	61
Eclampsia	7
Hyperemesis Gravidarum	2
Pyelitis	3
<i>Hæmorrhage—</i>	
Accidental	4
Placenta Prævia	17
<i>Induction of Labour—</i>	
Dead Fœtus	1
Post Maturity	7
Small Pelvis	14
Toxæmia	2
<i>Cases of Puerperal Sepsis—</i>	
Acute Mastitis	7
Not Transferred (Mild)	4
Transferred	6

Cause.	Number.	Continued from previous column.	Number.
<i>Cases of Ophthalmia Neonatorum—</i>		<i>Cause.</i>	
Cured (Mild)	8	Prolapsed Cord	1
Transferred	1	Mother—Toxæmia... ..	11
<i>Infants not entirely Breast Fed—</i>		Mother—Eclampsia	3
Both Breasts Amputated	1	Mother—Diabetes	1
Debility of Mother	13	Attempted Forceps Delivery before admission	7
Harelip and Cleft Palate	1	Premature Twin	1
Mammary Abscess... ..	2	Monster	4
Mother Dead	2	Ascites of Fœtus	1
Puerperal Insanity	1	Cause Unknown	16
Mother Unwilling	2	(7 of these were macerated)	
<i>Maternal deaths due to Accidents of Labour—</i>		<i>Malpresentations—</i>	—
Obstetric Shock	2	<i>DEATHS OF INFANTS WITHIN 10 DAYS OF BIRTH</i>	
Shock following Cæsarian Section	1	Prematurity	11
<i>Maternal deaths due to Diseases of Pregnancy—</i>		Jaundice	1
Ante- Partum Hæmorrhage	1	Congenital Heart Disease	1
Eclampsia	3	Convulsions	1
Toxæmia	2	Marasmus	2
<i>Maternal deaths due to Diseases incidental to Pregnancy—</i>		Melæna Neonatorum	2
Mitral Disease with Pulmonary Embolism	2	Spina Bifida	1
Paraplegia, Septic Bedsores	1	Subtentorial Hæmorrhage	2
Pneumonia, Influenza	1	Cerebral Hæmorrhage	1
Septicæmia	2	<i>CASES OF CONGENITAL DEFORMITY.</i>	
<i>Stillbirths—</i>		Anencephalus	3
Ante Partum Hæmorrhage due to:—		Cleft Palate	2
(a) Placenta Prævia	7	Cyst under Tongue	1
(b) Accidental Hæmorrhage	—	Hydrocephalus	4
Hydrocephalus	4	Maldevelopment of Second and Third Fingers of Right Hand	1
Veneral Disease (Syphilis) in Mother	4	Spina Bifida	1
Transverse Lie	2	Talipes	2
Breech Presentation	3	<i>CASES OF BIRTH INJURY.</i>	
Face Presentation	1	Cephalhæmatoma	8
Occipito—Posterior (Unreduced)	1	Facial Paralysis	1
Prolonged Second Stage	1	Fracture of Humerus	1
		Subtentorial Hæmorrhage	2

RADIOLOGICAL DEPARTMENT.

During 1933 the following examinations and treatment were effected:— (Last year's figures are given in brackets.)

Radiological Examinations 3097 (2706)

Treatments by:—

Deep X-Rays	109	(185)
Superficial X-Rays	156	(17)
Diathermy	13	(5)
Ultra-Violet Rays	8552	(10,011)
Clinical Attendances	1089	(1254)
Operations under General Anæsthesia	14	(14)
Operations under Local Anæsthesia	—	(11)
Dressings for Out-patients	1161	(1853)
Films used	8013	(6890)

RADIUM THERAPY DEPARTMENT.

Patients admitted to Hospital	...	...	136
Out-patients' Attendances	...	...	132
New Cases	...	...	77
Number fit for palliative treatment only	23%		
Number of Radon Seeds made	...		511
Total output of Radon ...'	...	...	2·598 millicuries

Owing to a larger number than usual failing to attend for periodic examination, a detailed analysis of results is not possible this year. It is known, however, that about 50% of the patients who were regarded as being suitable for full radiation are alive and symptom free. This number includes several who were treated three years ago. The treatment of selected cases with lead selenide has been attempted, but the number so treated is too small for any conclusions to be drawn from the results obtained.

A closer co-operation with the deep X-Ray Therapy Department has been achieved and suitable patients have been treated by a combination of radium and deep X-Ray therapy.

DEATHS.

There have been 1,019 deaths in Hospital during the year as compared with 1,013 in 1932. The relation between the ages of patients and the number of deaths is shown in the sub-joined table:—

Years of age	All Ages	-1	1 -	2 -	10 -	16 -	20 -	30 -	40 -	50 -	60 -	70 -	80 -	90 -
Number of Deaths	1019	83	19	16	15	16	38	63	85	161	224	230	66	3

THE CAUSES OF DEATH AT ALL AGES HAVE BEEN:—

	Under 16 years	Over 16 years	Total		Under 16 years	Over 16 years	Total
Aneurysm, Aorta ...	—	3	3	Hernia, Diaphragmatic ...	—	1	1
Appendicitis, Acute ...	4	12	16	Hydrocephalus ...	1	—	1
Appendicitis, Chronic ...	—	1	1	Hyperemesis, Gravidarum ...	—	1	1
Arterio-sclerosis ...	—	15	15	Hyper Pyrexia, Unknown Origin ...	1	—	1
Arthritis, Septic ...	—	1	1	Icterus Neonatorum ...	—	1	1
Atelectasis ...	2	—	2	Intestinal Obstruction ...	—	3	3
Birth Injuries ...	3	—	3	Intestinal Obstruction, Peritoneal	—	—	—
Bronchiectasis ...	—	6	6	Adhesions ...	—	2	2
Bronchitis, Acute ...	2	6	8	Ischio-Rectal Abscess ...	—	1	1
Bronchitis, Chronic ...	—	46	46	Locomotor Ataxy ...	—	4	4
Bronchial Asthma ...	—	2	2	Lymphatic Leukæmia, Acute ...	—	1	1
Broncho-Pneumonia ...	20	29	49	Malignant Disease of:	—	—	—
Bruises Multiple ...	—	5	5	Bladder ...	—	2	2
Burns ...	—	3	3	Brain ...	1	—	1
Carcuncle ...	—	2	2	Breast ...	—	6	6
Cerebral Abscess ...	—	1	1	Colon ...	—	12	12
Cerebral Hæmorrhage ...	—	79	79	Epiglottitis ...	—	1	1
Cerebral Thrombosis ...	—	6	6	Foot ...	—	1	1
Cerebral Tumour ...	1	1	2	Larynx ...	—	2	2
Cholecystitis ...	—	3	3	Liver ...	—	2	2
Cirrhosis of Liver ...	—	1	1	Lungs ...	—	1	1
Colitis, Ulcerative ...	—	2	2	Lymphatic Glands ...	—	1	1
Convulsions ...	2	—	2	Maxilla ...	—	2	2
Cystitis ...	—	3	3	Oesophagus ...	—	2	2
Cystic Degeneration of Kidneys ...	—	2	2	Orbit ...	—	1	1
Dementia Senile ...	—	1	1	Ovary ...	—	3	3
Diabetes Mellitus ...	—	15	15	Palate ...	—	2	2
Disseminated Sclerosis ...	—	2	2	Pancreas ...	—	5	5
Diverticulitis, Acute ...	—	1	1	Penis ...	—	1	1
Duodenal Ulcer ...	—	4	4	Peritoneum ...	—	1	1
Duodenal Ulcer Hæmorrhage ...	—	6	6	Prostate ...	—	3	3
Duodenal Ulcer, Perforated ...	—	10	10	Rectum ...	—	7	7
Eclampsia ...	—	3	3	Skin ...	—	1	1
Empyema ...	—	1	1	Spine ...	—	3	3
Enteritis, Acute ...	—	1	1	Stomach ...	—	21	21
Epilepsy ...	—	2	2	Tonsil ...	—	1	1
Erysipelas ...	—	2	2	Tongue ...	—	5	5
Extroversion of Bladder, Congenital ...	1	—	1	Uterus ...	—	13	13
Fibroids, Uterine ...	—	5	5	Vulvæ ...	—	2	2
Fracture of:	—	—	—	Marasmus ...	16	—	16
Clavicle ...	—	1	1	Mastoiditis, Acute ...	1	—	1
Femur ...	—	8	8	Mediastinal Abscess ...	—	1	1
Humerus ...	—	2	2	Meningitis, Meningococcus ...	—	2	2
Radius and Ulna ...	—	1	1	Meningitis, Pneumococcal ...	—	3	3
Skull... ..	—	2	3	Meningocele ...	—	1	1
Tibia and Fibula ...	—	1	1	Mesenteric Thrombosis ...	—	1	1
G.P.I. ...	—	1	1	Metrorrhagia ...	—	1	1
Gangrene, Senile ...	—	9	9	Morbus Cordis ...	—	3	3
Gangrene, Diabetic ...	—	5	5	Myelitis, Transverse ...	—	2	2
Gastric Ulcer, Operation ...	—	1	1	Nephritis, Acute ...	—	1	1
Gastric Ulcer, Hæmatemesis ...	—	3	3	Nephritis, Chronic ...	—	33	33
Gastric Ulcer, Perforated ...	—	2	2	Neuritis, Peripheral ...	—	1	1
Gastro-Enteritis ...	—	7	7	Obstructed Labour ...	—	3	3
Hæmaturia ...	—	1	1	Osteomyelitis, Acute ...	—	3	3
Hemiplegia ...	—	17	17				

CAUSES OF DEATH AT ALL AGES—*continued.*

	Under 16 years	Over 16 years	Total		Under 16 years	Over 16 years	Total
Pvarian Cyst	—	1	1	Septicæmia:	—	—	—
Oancreatitis, Acute	—	12	12	Acute Arthritis	—	1	1
Paralysis Agitans	—	4	4	Abortion	—	3	3
Paraplegia	—	3	3	Cryptogenic... ..	—	1	1
Pernicious Anæmia	—	6	6	Infected Wound	—	1	1
Peritonitis, General	1	—	1	Phlebitis	—	1	1
Placenta Prævia	—	1	1	Puerperal	—	7	7
Pneumonia, Hypostatic	2	10	12	Tonsillitis	—	1	1
Pneumonia, Lobar	6	34	40	Spina Bifida	2	—	2
Poisoning, Suicidal, Ammonia	—	1	1	Stenosis of Larynx, Congenital	1	—	1
Pneumonia, Influenzal	11	27	38	Strangulated Hernia:	—	—	—
Prematurity	26	—	26	Femoral	—	2	2
Progressive Muscular Atrophy	—	1	1	Ventral	—	1	1
Prostatic Hypertrophy	—	16	16	Stricture of Urethra	—	1	1
Pulmonary Embolus	—	2	2	Sunstroke	—	2	2
Pyloric Stenosis	2	1	3	Syphilis, Tertiary	—	2	2
Pyonephrosis	1	3	4	Syphilis, Congenital	1	—	1
Retained Placenta	—	1	1	Toxæmia of Pregnancy	—	2	2
Rheumatic Fever	1	1	2	Tetany of Pregnancy... ..	—	1	1
Rheumatoid Arthritis	—	2	2	Tuberculosis of:	—	—	—
Ruptured Gall Bladder	—	1	1	Intestine	1	—	1
Ruptured Intestine, Traumatic	—	1	1	Lungs	—	31	31
Senile Decay	—	109	109	Meninges	3	2	5
				Peritoneum	—	1	1
				Spine	—	1	1
				Tuberculosis, General	2	—	2

The dental work done is shown in the following table.

DENTAL DEPARTMENT.

Number of Patients	Extractions		Fillings in Perm. Teeth	Scalings	Dentures etc.	General Anaes- thetics
	Tempor- ary	Perma- nent				
318	59	1456	47	26	71	124

MASSAGE DEPARTMENT.

Number of treatments 18,698

(B) INFECTIOUS DISEASES HOSPITALS.

The following table gives a summary of the cases admitted to the infectious diseases hospitals:—

	Leeds Road	North Bierley	Calverley	Thornton	Total
Smallpox	—	—	—	—	—
Scarlet Fever	598	107	89	—	794
Diphtheria	286	41	11	—	338
Enteric Fever	10	—	1	—	11
Cerebro Spinal Fever	6	—	—	—	6
Encephalitis Lethargica	1	—	—	—	1
Erysipelas	65	—	2	—	67
Chicken Pox	39	—	—	—	39
Measles	128	—	—	—	128
Whooping Cough	26	—	—	—	26
Pneumonia	6	—	—	—	6
Other Diseases	158	—	—	—	158
Totals	1,23	148	103	—	1,574

CITY HOSPITAL, LEEDS ROAD.

REPORT OF THE MEDICAL SUPERINTENDENT, JOHN DOUGLAS,
M.B., Ch.B., D.P.H.

I have the honour to present the Annual Report for the year ended 31st December, 1933.

On 1st January, 1933, there were 121 patients in hospital, and 1,323 patients were admitted during the year, making a total of 1,444 under treatment. Of these, 1,202 were discharged cured or relieved, 63 died, and 183 were in hospital on 31st December, 1933.

ADMISSIONS.

The number of admissions (1,323) shows an increase of 302 on the previous year.

The maximum number of patients admitted during any one month was 146, in December.

The maximum number of patients in hospital on any one day was 184, on December 10th.

The minimum number of patients in hospital on any one day was 95, on July 18th.

The average daily number of patients in hospital was 129.

The average duration of stay of patients whose treatment was completed was 29.4 days.

TABLE SHOWING NUMBER OF CASES ADMITTED DURING EACH MONTH.

1933 Month	Scarlet Fever			Diphtheria			Other Diseases			Total Admissions		
	M.	F.	T'tal	M.	F.	T'tal	M.	F.	T'tal	M.	F.	T'tal
January	31	21	52	13	10	23	22	33	55	66	64	130
February	13	22	35	7	5	12	11	17	28	31	44	75
March	21	19	40	10	18	28	26	32	58	57	69	126
April	17	16	33	5	9	14	20	25	45	42	50	92
May	24	32	56	6	3	9	20	27	47	50	62	112
June	17	28	45	7	16	23	21	24	45	45	68	113
July	25	29	54	10	16	26	17	18	35	52	63	115
August	21	12	33	12	9	21	10	10	20	43	31	74
September	28	23	51	12	17	29	9	14	23	49	54	103
October	29	26	55	10	18	28	5	14	19	44	58	102
November	25	50	75	15	12	27	10	23	33	50	85	135
December	33	36	69	19	27	46	14	17	31	66	80	146
Total	284	314	598	126	160	286	185	254	439	595	728	1323

It will be noted that over 33% of the patients suffered from diseases other than Scarlet Fever and Diphtheria. The satisfactory accommodation of these patients continues to prove exceedingly difficult.

HOSPITAL DEATH RATE.

The death rate in respect of all admissions was 4.76%.

SCARLET FEVER.

Of 630 cases admitted as Scarlet Fever the diagnosis was confirmed in 598.

The average length of stay of patients whose treatment was completed was 34.23 days.

TABLE SHOWING AGE AND SEX INCIDENCE OF SCARLET FEVER PATIENTS.

Age		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	Totals
Recovered	Males	99	94	43	22	9	8	4	2	3	—	—	284
	Females	82	130	47	14	15	7	7	6	2	—	1	311
Died	Males	—	—	—	—	—	—	—	—	—	—	—	—
	Females	3	—	—	—	—	—	—	—	—	—	—	3
Totals		184	224	90	36	24	15	11	8	5	—	1	598
Age incidence per cent		30.77	37.45	15.05	6.02	4.01	2.50	1.84	1.34	0.84	—	0.17	100
Fatality rate per cent		1.63	—	—	—	—	—	—	—	—	—	—	.5

Type of the Disease.

The disease continued to be of a mild type.

There were three deaths, a case mortality rate of 0.5%.

There were no toxic cases and only 4 septic cases.

Return Cases.

Of 590 patients discharged from the Scarlet Fever Wards, 12 apparently were responsible for 15 secondary cases. This gives a return case rate of 2.54%, a figure slightly higher than that of 1932, yet still about the average.

Of the 12 infecting cases 8 had the complication Rhinitis during convalescence; in 7 of these the nasal discharge had ceased before discharge from hospital, and the other was removed from hospital against medical advice and on the parents' responsibility while nasal discharge was still present. Two of the 12 infecting cases had tonsils and adenoids removed before discharge and the remaining 2 had no obvious condition to which infection of a secondary case could be attributed.

The average duration of stay in hospital of patients giving rise to secondary cases was 38.83 days.

The average interval elapsing between the discharge of the primary cases and the onset of the disease in the secondary cases was 9.73 days.

Return cases infected in 1st week after primary cases' discharge 20%

"	"	2nd	"	"	"	"	53.33%
"	"	3rd	"	"	"	"	13.33%
"	"	4th	"	"	"	"	13.33%

Complications.

The percentage incidence of the principal complications is given in the following table :—

Complication	No. of Cases.	Percentage incidence.
Late Adenitis (suppurative in 5 cases)...	59	..... 9.86
Late Rhinitis	109	..... 18.22
Otorrhea (unilateral in 51 cases, bilateral in 21 cases)	72	..... 12.04
Myositis and Arthritis (suppurative in 1 case)	16	..... 2.67
Nephritis and late Albuminuria	21	..... 3.51

Other complications were : Septic Fingers, 13 cases; Bronchitis, 2 cases; Conjunctivitis, 2 cases; Pyelitis, 2 cases; Endocarditis, 1 case; Erythema Nodosum, 1 case, and Chorea, 1 case.

Ear.

There were 72 cases of Otorrhea (12.04%), unilateral in 51 cases, bilateral in 21. Of these 12 developed Acute Mastoiditis (16.66%), all unilateral, and 1 developed lateral Sinus Thrombosis; 1 developed a septic form of Meningitis (organism not recovered).

Nose.

Rhinitis during convalescence occurred in 109 cases (18.22%). This is a high incidence for this complication and is partly attributable to unavoidable overcrowding of the wards. It may be noted that there was an increase in the return case rate corresponding to this increase in the incidence of Rhinitis.

Throat.

Tonsillitis during convalescence occurred in 22 cases.

Relapses.

A recurrence during convalescence of the signs and symptoms of Scarlet Fever occurred in only 3 cases, giving a percentage relapse rate of 0.5.

Serum Treatment.

Scarlatinal Antitoxin was injected intramuscularly in the more severe cases. In all 72 cases were so treated (12·04%). Serum rashes occurred in 5·56%. The average duration of stay in hospital of serum-treated cases was 39·1 days. The incidence of complications in serum-treated cases was much lower than in non-serum treated cases, for example :—

		Serum Treated Cases.		Non-serum Treated Cases.	
Late Adenitis	... ..	5·56%	.....	10·46%	
Late Rhinitis	... ..	9·72%	.....	19·39%	
Otorrhea	... ..	8·33%	.....	12·55%	
Nephritis and Albuminuria		2·77%	.....	3·61%	

While the two series are not strictly comparable, bearing in mind the fact that serum was only given to the more severe cases, the figures tend to suggest that serum therapy may have more influence in reducing the incidence of complications than is generally supposed.

Operative Treatment.

The services of Mr. W. Appleyard, F.R.C.S., were available in the operative treatment of Ear, Nose and Throat complications.

Operations.	Number of Cases.
Mastoid drainage	12
Tonsillectomy and Adenoid curettage	28

Cross Infection.

Twelve patients developed a secondary infection. Of these 1 was incubating Measles on admission and gave rise to 4 secondary cases.

One was incubating Chicken-pox on admission and infected 6 others.

DIPHTHERIA.

Three hundred and ten patients were admitted to the wards with the diagnosis of diphtheria, which was confirmed in 286 cases.

The average length of stay of patients whose treatment was completed was 46·8 days.

TABLE SHOWING AGE AND SEX INCIDENCE OF DIPHTHERIA PATIENTS:

Age		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	Total
Recovered	Males	35	58	17	4	4	2	2	1	—	—	—	123
	Females	32	50	34	21	9	3	1	2	1	—	—	153
Died	Males	1	2	—	—	—	—	—	—	—	—	—	3
	Females	2	3	1	—	—	—	—	—	—	—	1	7
Totals		70	113	52	25	13	5	3	3	1	—	1	286

Type of the Disease.

The disease was moderately severe in type. There were 7 toxic hæmorrhagic cases.

Case Mortality Rate.

There were 10 deaths, giving a case mortality rate of 3.5%. All the toxic hæmorrhagic cases died.

Fatal Cases (excluding Bacteriological cases).

Day of disease on admission to hospital.

Day of disease	1	2	3	4	5	6	7+
Number of cases	—	—	4	3	1	1	1

Fatal Cases (excluding Bacteriological cases).

Day of disease on which death occurred.

Day of disease	4	6	7	8	9	12	17
Number of cases	1	1	1	2	2	1	2

Average 10th day.

Sites of Infection.

Site	Number of Cases	Percentage of total Cases	Number of Deaths	Case Mortality Rate per cent.
Fauces	176	65.43	—	—
Nose	3	1.12	—	—
Larynx	2	9.29	1	4.0
Fauces and Larynx ...	18			
Fauces, Larynx, Nose and Nasopharynx ...	5			
Fauces, Nose and Nasopharynx ...	54	20.08	9	19.15
Wound	3	1.12	—	—

In addition to the above, 25 cases were admitted on bacteriological evidence only. The fauces and nose were the sites chiefly affected. In 7 of them tonsillectomy and adenoid curettage was performed with successful results.

Complications.

The complications were classified as follows:—

Paralyses.	No. of Cases.	Percentage of Total Cases.
All types	17	6.32
Palate	8	2.97
Ocular muscles	3	1.12
Pharyngeal muscles	1	0.37
Leg muscles	5	1.86
Other Complications—		
Otorrhea	1	0.37

LARYNGEAL DIPHTHERIA.

There were 25 patients (14.78%) in whom the larynx was affected either primarily or secondarily.

Operative interference was necessary in 10 cases.

Operation.	No. of Cases.	No. of Deaths.	Mortality rate per cent.
Intubation of Larynx	9	1	11.11
Tracheotomy	—	—	—
Intubation and subsequent			
tracheotomy	1	—	—

The case mortality of all cases requiring operative treatment was 10%.

Serum Treatment.

Antitoxin therapy was employed in every case. In the more severe cases the serum was given intravenously, but in the majority intramuscular administration of the serum was effective.

There were no cases of anaphylaxis following the administration of serum and only 5% showed any reaction.

Dosage of Anti-Diphtheritic serum.

Average dose—all cases	13,559 units.
Average dose—mild cases	7,124 units.
Average dose—average cases	15,692 units.
Average dose—severe cases	38,353 units.
Average dose—toxic hæmorrhagic cases	62,000 units.

Cross Infection.

One case was incubating Chicken Pox on admission to the Wards : there were no secondary cases.

Two cases were incubating Measles on admission, and gave rise to 4 secondary cases.

ENTERIC FEVER.

There were 10 cases of Enteric Fever admitted to the Wards, the infecting organism being the *Bacillus Typhosus* in 3 cases and the *Bacillus Paratyphosus B.* in 7 cases.

TABLE SHOWING MONTHLY INCIDENCE OF ENTERIC FEVER.

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
—	—	2	2	3	—	1	—	—	—	2	—	10

TYPHOID FEVER.

There were 3 cases of Typhoid Fever and no deaths. They were females, 2 of the age group 30-35 years and 1 of the age group 65-70 years.

Complications.

Intestinal Hæmorrhage.—This occurred in a woman of 66 years on the 16th day of the disease.

Relapses.

A repetition of the signs and symptoms of the disease after a period of apyrexia occurred in 2 cases : (1) On the 31st day of the disease in a woman of 66 years ; (2) on the 28th day of the disease in a woman of 33 years.

PARATYPHOID FEVER B.

There were 7 cases of Paratyphoid Fever B. and no deaths.

TABLE SHOWING AGE INCIDENCE OF PARATYPHOID FEVER PATIENTS.

Age		0-5	5-10	10-15	15-20	20-25	25-30	Totals
Recovered	Male	—	1	—	—	1	—	2
	Female	—	—	1	3	—	1	5
Died	Male	—	—	—	—	—	—	—
	Female	—	—	—	—	—	—	—
Total		—	1	1	3	1	1	7

There were no complications.

CEREBRO-SPINAL FEVER.

There were 6 cases of this disease admitted to Hospital and 2 patients died, a case mortality rate of 33·33%.

TABLE SHOWING AGE INCIDENCE OF CEREBRO-SPINAL FEVER.

Age		0-5	5-10	10-15	15-20	20-25	25-30	35-40	Total
Recovered	Males	1	—	—	—	—	—	—	1
	Females	—	1	1	1	—	—	—	3
Died	Males	—	—	—	—	—	—	1	1
	Females	—	—	—	—	1	—	—	1
Total ...		1	1	1	1	1	—	1	6

Average day of disease on admission to hospital—

Recoveries : Third to fourth day.

Deaths : Twentieth day.

Average day of disease on which death occurred : Twentieth.

Average number of punctures performed (lumbar, cistern, and ventricular) : Five to six.

Average amount of serum given, intrathecally—52 ccs; intramuscularly—45 ccs.

There were no complications.

Type of Organism.

In 2 of the cases the Meningococcus was shown to belong to Type I.

ERYSIPELAS.

TABLE SHOWING AGE INCIDENCE OF ERYSIPELAS.

Age		0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	Total
Recovered	Males ...	4	—	1	—	—	1	1	7	2	4	1	1	4	1	—	2	—	29
	Females ...	1	1	2	2	3	6	—	4	2	2	—	2	2	1	1	—	—	29
Died	Males ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	3
	Females ...	3	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	4
Total ...		9	1	3	2	3	7	1	12	4	6	1	3	6	2	2	2	1	65

Case mortality rate, 10·77%.

Site of Infection.

Site.	Number of Cases	Percentage of Total Cases
Head and neck	52	80.0
Wound (mastoid 7, other wounds 2)	9	13.85
Leg	1	1.53
Trunk (migrans)	3	4.62

Complications.

Nephritis, 1 case.

Serum Treatment.

41.54% of patients were treated with Anti-streptococcal serum.

MEASLES.

One hundred and twenty-eight patients were admitted to the Wards suffering from Measles. These cases were either from other institutions, or had a severe complication which made treatment at home difficult.

Complications.

Complication.	Number of Cases.	Percentage Incidence.
Broncho Pneumonia	43	33.6
Otorrhea	19	14.84

Other complications were Mastoiditis 3 cases, Corneal Ulcer 1 case, Empyema 1 case, Enteritis 1 case, Laryngitis during convalescence 1 case, and Pulmonary Tuberculosis 1 case.

Case Mortality Rate.

There were 9 deaths, a case mortality rate of 7.03%.

WHOOPING COUGH.

Twenty-six cases were admitted to the Wards during the year. These patients were either from other institutions or had a severe complication which made treatment at home difficult.

Complications.

In 15 cases Broncho Pneumonia was present; 1 case developed Pneumococcal Meningitis.

Case Mortality Rate.

There were 6 deaths, a case mortality rate of 23.08%.

OTHER DISEASES.

Patients admitted suffering from other conditions to which reference has not yet been made were classified as follows :—

INFECTIOUS DISEASES:—

Disease.	Total No. of Cases. Deaths	
Chicken Pox	39	—
Influenza	18	1
Rubella... ..	13	—
Encephalitis Lethargica	1	—
Bacillary Dysentery	6	—

PULMONARY DISEASES

Bronchitis	3	—
Broncho Pneumonia	3	2
Lobar Pneumonia	—	—
Empyema Thoracis	2	—
Pulmonary Tuberculosis	5	1

SEPTIC CONDITIONS OF EAR, NOSE AND THROAT:—

Tonsillitis	38	—
Peritonsillar Abscess	1	—
Acute Laryngitis	1	—
Otorrhea	1	—
Mastoiditis	1	—
Ludwig's Angina	1	—

OTHER SEPTIC CONDITIONS:

Cellulitis of Arm	1	—
Cellulitis of Leg	2	1
Septic Foot	1	—
Septic Finger	1	—

DISEASES OF ALIMENTARY CANAL:—

Enteritis (Organism not recovered)... ..	8	1
Food Poisoning	1	—
Carcinoma of Stomach	1	—
Gastric Ulcer	1	—

SKIN DISEASES:—

Various Erythematata	5	—
Pemphigus	1	—
Urticaria	1	—
Lysol Dermatitis	1	—

DISEASES OF THE BRAIN AND SPINAL CORD:—

Cerebral Abscess	1	—
Tuberculous Meningitis	3	3
Streptococcal Meningitis	3	2
Rheumococcal Meningitis	1	1
Meningismus	1	—
Tetanus	1	1

OTHER DISEASES:—

Acute Miliary tuberculosis	1	1
Cervical Abscess	1	—
Cyclical Vomiting	1	1
Dysentery Carrier	1	—
Hæmolytic Streptococcal Carrier	4	—
Injury to Leg	1	—
Nil Abnormal Detected	11	—
Post Influenzal debility	1	—
Prolapsus Ani... ..	1	—
Sub-acute Rheumatic fever	1	—
Synovitis of Knee	1	—
Ichthyma	1	—
Sprained Ankle	1	—
Scalds of face and arm	1	1
Streptococcal Septicæmia	6	4
Tuberculosis Peritonitis	1	1
Total	204	22+4

REMOVAL OF INFECTIOUS CASES.

One motor ambulance is stationed at Leeds Road Fever Hospital. It is used for the conveyance of patients to Leeds Road Hospital, Calverley Hospital and North Bierley Hospital.

During the year the ambulance covered 13,504 miles in removing cases to the various Hospitals.

All cases are removed separately, so as to minimise as much as possible the risk of cross-infection, and the ambulance is carefully disinfected after each journey.

A trained nurse and a removals officer accompany the ambulance on each journey.

EAR, NOSE AND THROAT CASES.

The local authority has treated in a special department of this hospital, for some years, operative cases of diseases of the Ear, Nose and Throat occurring among children referred from the school and maternity and child welfare clinics.

The following is a summary of the cases treated in 1933 :—

Tonsillectomy and Adenoid Curettage—

From School Clinics	630 cases.
From Child Welfare Clinics	45 cases.
From Todmorden	56 cases.
	731 cases.
Removal of Aural Polypus	1 case.
Total	732 cases.

SICKNESS OF THE STAFF.

Forty-six members of the nursing and domestic staff were treated in this hospital for various conditions.

Disease.		Nursing Staff.		Domestic Staff.		Working days lost to Hospital.
Scarlet Fever	...	1	...	1	...	83
Diphtheria	...	1	...	7	...	340
Influenza	...	7	...	4	...	143
Septic conditions of						
Fauces	...	8	...	7	...	122
Sub-acute Rheumatism	...	—	...	1	...	77
Cellulitis of Arm	...	1	...	—	...	4
Erysipelas	...	1	...	—	...	10
Jaundice	...	1	...	—	...	18
Sprained Ankle	...	—	...	1	...	5
Septic Finger	...	—	...	1	...	26
		—		—		—
Totals	...	17	...	22	...	828
		—		—		—

The one case of Scarlet Fever in the nursing staff occurred in a girl who was Dick positive and who had not been immunised.

The single case of Diphtheria also amongst the nurses also occurred in a girl who was Shick positive, previous to the commencement of the immunisation course.

Three hundred and forty working days were lost to the hospital owing to an outbreak of Diphtheria in the maids' home. Hitherto it has not been considered advisable to immunise the domestic staff against Diphtheria and Scarlet Fever; a reversal of this policy would seem necessary.

In conclusion, it is with pleasure that I acknowledge my indebtedness to the Assistant Medical Officer, the Matron, the Sisters and Nursing and other Staff for their loyal support and assistance.

SUMMARY.

YEAR.	SMALL-POX.			ENTERIC FEVER.			SCARLET FEVER.			DIPHTHERIA.			OTHER DISEASES.			TOTALS.			From 1922 to 1933.	
	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Cases.	Deaths.	Death-rate per 100.	Aggregate No. of days spent in Hospital.	Average No. of days for each Patient.
1922	—	—	—	9	1	11.1	924	19	2.05	256	7	2.73	79	8	10.12	1,268	35	2.8	48,753	38.3
1923	—	—	—	13	2	15.4	511	4	0.78	188	14	7.4	187	38	20.3	899	58	6.4	30,465	33.8
1924	—	—	—	13	—	—	334	2	0.59	163	5	3.6	134	21	15.7	644	28	4.3	21,493	33.7
1925	—	—	—	5	1	20.0	387	3	0.77	274	12	4.57	306	42	13.7	972	58	5.96	30,318	31.2
1926	—	—	—	9	—	—	450	—	—	254	16	6.29	223	15	6.72	936	31	3.31	29,127	31.1
1927	—	—	—	11	1	9.0	335	—	—	292	26	8.9	254	31	12.2	892	57	5.6	25,475	28.5
1928	140	4	2.85	12	2	16.6	812	3	0.37	132	4	3.03	126	11	8.6	1,222	24	1.9	35,129	28.7
1929	—	—	—	3	1	33.3	1,103	9	0.81	338	39	11.5	232	23	10.3	1,676	72	4.3	49,080	29.3
1930	—	—	—	5	—	—	875	12	1.37	271	18	6.64	153	13	8.5	1304	43	3.29	38,216	29.3
1931	26	—	—	4	1	25.0	590	1	0.17	183	9	4.92	326	35	10.74	1103	46	4.17	36,672	33.2
1932	—	—	—	28	1	3.57	490	6	1.22	230	17	7.39	273	24	8.79	1,021	47	4.7	36,348	35.6
1933	—	—	—	10	—	—	598	3	0.5	286	10	3.5	439	50	11.39	1,323	63	4.76	38,896	29.4

VIII.—HOUSING.

(1) *New Houses in 1933.* The average number of new houses certified as fit for human habitation annually during the five years preceding 1919 was 180, and the following statement shows the number so certified each year since then :—

Year	New Houses	Year	New Houses	Year	New Houses
1919	6	1924	711	1929	958
1920	38	1925	1,521	1930	508
1921	479	1926	2246	1931	504
1922	480	1927	2,069	1932	1,129
1923	257	1928	1,927	1933	1,141
1919-23	252 (average)	1924-28	1695 (average)	1929-33	848 (average)

The number of new houses built during the past ten years in each Ward and certified as fit for human habitation in accordance with the Bradford Waterworks and Improvement Act, 1871, is shown in the table on the following page.

On the 31st December, 1933, contracts had been let by the City Council in respect of 124 tenement dwellings to be erected on land in White Abbey for persons to be displaced from the Exchange Clearance Areas. Seventeen single room dwellings erected by the Corporation on the Bierley site were completed during the year, and at the close of the year 598 were being built by private enterprise.

The total number of new houses built in the City during the 12 years ended 31st December last was 13,451; 7,251 of these houses have been built by the Local Authority with State assistance; 4,222 houses were built by private enterprise with the aid of the Government subsidy (3,761 under the Housing Act, 1923, and 461 under the Housing (Financial Provisions) Act, 1924); and 1,912 houses were built by private enterprise without State assistance. In addition 66 houses and shops were built by the Local Authority without State assistance.

The type and accommodation of the houses built by the Local Authority, together with their locality, are set out in the table on page 143.

NEW BUILDINGS.

Showing number of New Buildings certified as fit for habitation in each of the Wards, and in the whole City, during the years 1924—1933.

WARDS				1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Allerton	...	...	...	25	140	585	481	176	172	32	147	687	68
Bolton	...	...	...	5	58	125	203	388	36	11	22	55	69
Bradford Moor	...	...	...	193	176	176	110	29	46	24	11	49	98
Clayton	...	...	...	17	12	53	40	33	38	25	18	24	16
East	...	...	...	9	14	3	12	—	—	—	—	3	15
East Bowling	...	...	...	—	3	5	36	8	—	9	13	8	7
Eccleshill	...	...	...	66	84	180	304	686	173	43	68	59	32
Exchange	...	...	...	1	—	—	—	1	—	—	—	—	1
Great Horton	...	...	...	71	84	81	161	88	56	26	78	66	97
Heaton	...	...	...	15	33	25	32	—	7	16	14	4	25
Idle	...	...	...	105	106	150	216	87	54	9	40	13	30
Listerhills	...	...	...	2	—	—	—	—	—	3	—	—	—
Little Horton	...	...	...	12	17	36	51	45	57	22	15	28	35
Manningham	...	...	...	10	18	8	15	5	116	144	—	—	7
North	...	...	...	—	3	—	3	—	—	2	—	—	—
North Bierley East	...	...	...	58	403	397	134	264	52	14	13	41	40
North Bierley West	...	...	...	88	213	251	100	74	88	69	35	64	506
South	...	...	...	—	—	6	—	—	—	—	—	—	—
Thornton	...	...	...	7	58	134	118	24	2	3	8	4	21
Tong	...	...	...	2	3	4	2	2	1	1	2	4	32
West	...	...	...	—	56	1	—	—	—	12	—	1	—
West Bowling	...	...	...	25	40	26	51	17	60	43	20	19	42
City Total				711	1521	2246	2069	1927	958	508	504	1129	1141

(2) *Overcrowding.* Many very serious cases of overcrowding continue to come to the knowledge of the department during the year, but despite the increase in the provision of houses there still remains a great scarcity of housing accommodation, which complicates the position. On the 31st December, 1933, the number of applicants for new houses was approximately 2,565, 415 of whom were living in apartments.

TYPES OF HOUSES BUILT BY THE LOCAL AUTHORITY.

1920 to 1932.

Site	Parlour and 4 bed- rooms	Parlour and 3 bed- rooms	Non- parlour 3 bed- rooms	Non- parlour 2 bed- rooms	Houses for aged persons	Flats	Total	Houses and Shops
Odsal	—	28	386	40	—	—	454	4
Thornbury	—	20	130	16	—	—	166	2
Bradford Moor	12	114	468	74	—	—	668	12
Scholemoor	10	122	360	12	—	—	504	6
Thackley	—	—	58	—	—	—	58	—
Eccleshill	—	120	718	40	—	—	878	6
Shirley Manor	—	—	350	—	—	—	350	4
Chellow Grange	—	52	674	44	—	—	770	—
Bierley	—	50	814	—	49	—	913	16
Thornton	—	100	200	20	—	—	320	—
Swain House	—	32	654	52	—	—	738	8
Lower Grange	—	68	718	30	—	—	816	8
Whetley Lane	—	—	180	36	24	—	240	—
Greengates	—	—	40	—	—	—	40	—
Musgrave Road	—	—	42	—	—	—	42	—
White Abbey... ..	—	—	40	—	—	—	40	—
Low Moor	—	—	22	—	—	—	22	—
Idle	—	—	86	—	—	—	86	—
Woodhall Place	—	—	6	—	—	—	6	—
Clayton	—	1	73	—	—	—	74	—
Longlands	—	—	—	—	—	66	66	—
Totals	22	707	6,019	364	73	66	7,251	66

(3) *White Abbey Area Improvement Scheme.* With regard to the scheme all the properties have been acquired, and 92 per cent. of the properties have been demolished. Substitution accommodation has been provided in the 66 tenement dwellings on the Longlands site; 42 houses at Musgrave Road, Eccleshill; 240 houses on the Whetley Lane site; and 40 houses in the White Abbey area.

(4) PROSECUTIONS, 1933.

Nature of Offence	No. of Cases	Result
Housing Act 1930, Sec. 39— Recovery of possession of build- ings subject to Demolition Orders.	9	Orders for possession made in 6 cases. The remaining cases were withdrawn, possession being obtained prior to date of hearing.

HOUSING : SLUM CLEARANCE AND RECONDITIONING.

In January, 1931, the Council, on consideration of representations made to them at that time, resolved that the dwelling-houses in four areas were in such a state that the most satisfactory method of dealing with the conditions in such areas was demolition of all the buildings in such areas. These areas were named Exchange Area "A," Exchange Area "B," Wapping Area, and Broomfields Area, and the Council resolved at that time that they should be further defined on maps to be submitted to them.

On the same date the Council proceeded further and resolved that Exchange Area "A" and Exchange Area "B" then defined be declared clearance areas and cleared of all buildings in accordance with the provisions of the Housing Act, 1930. These resolutions were, in due course, transmitted to the Minister of Health. The financial crisis later in the year rendered it impracticable for the Council to proceed with the programme of clearance then contemplated, but the Ministry of Health now state that the Government are of opinion that the present conditions are favourable to the success of a vigorous campaign of slum clearance and ask the Council to prepare a scheme of clearance. In the programme of any such campaign the areas above mentioned should be included as clearance areas, but the Broomfields Area will require to be divided into three or four areas. The areas, with the number of houses and persons to be displaced, are as follows :—

Area.						No. of Houses.	Persons to be displaced.
Exchange "A" and "B"	...	...	...	...	...	283	944
Wapping	...	...	...	...	...	682	2186
Broomfields	...	...	...	...	...	988	3487
Totals						1953	6617

In these areas, therefore, are 1,953 houses and 6,617 persons to be displaced.

For the removal of the worst housing conditions in Bradford, known as "slums," it does not seem necessary now to add to the areas above enumerated.

The other areas in the City which contain gravely defective housing can be best and most economically dealt with not by clearance but by extensive repairs, alterations and partial demolition, a process now known

as "reconditioning," in which very considerable progress has already been made.

The areas which should be dealt with by reconditioning are shown on maps appended and the particulars are as follows :—

Area Map.	Total No. of houses.	Total Population.	No. of houses to be demolished.	Persons displaced from houses demolished.
No. 1	281	892	112	356
No. 2	728	2381	291	952
No. 3	400	1220	160	488
No. 4	166	506	66	202
No. 5	987	3410	394	1363
Totals	2562	8409	1023	3361

The total number of houses affected is thus 2,562, of which 1,023 would be demolished, involving a displacement of 3,361 persons.

Provision of Houses.

The amount of housing accommodation to be provided for the persons displaced by clearance and reconditioning schemes and other housing activities depends in the main upon the amount of clearance and reconditioning work likely to be carried out during the next five years.

Of the areas classified for clearance both Exchange Area "A" and Exchange Area "B" are physically suitable for rehousing purposes, but as both areas are in the centre of the City and surrounded by business premises it is hardly possible to consider them as available for this purpose.

The Wapping Area is one of exceedingly bad building contours and its suitability for rehousing purposes is thus limited. It is suggested that the City Architect be instructed to report on the land in this area which could reasonably be made available for house building. It is not likely that much of it can be made so available at a reasonable cost.

The only area really suitable for rehousing purposes is the Broomfields Area, and it is suggested that this be built upon to its fullest extent because of the recognised need for houses of a cheap character near the centre of the City.

The total number of persons to be accommodated as a result of clearance and reconditioning schemes would be 9,978, 6,617 from clearance and 3,361 from reconditioning schemes. In order to provide for these persons, approximately 2,000 houses would be required, and it is only possible to go on with such clearance and reconditioning as the rehousing facilities for the displaced permit.

The 2,000 houses, if of the three bedroomed house type, would provide accommodation for 10,000 persons, but it would seem likely that the greater demand would be for the two bedroomed house type, as 54 per cent. of the houses in the clearance areas are occupied at the rate of three persons or under to one house. Indeed, 34 per cent. of the houses are occupied at the rate of two persons or one to a house. This is shown in the following table :—

TABLE SHOWING THE NUMBER OF PERSONS OCCUPYING HOUSES IN THE UNDERMENTIONED AREAS.

Number in Family.	<i>Exchange.</i>		<i>Wapping.</i>		<i>Broomfields.</i>	
	Number of Houses.	Per cent. of total occupied Houses.	Number of Houses.	Per cent. of total occupied Houses.	Number of Houses.	Per cent. of total occupied Houses.
1	32	12·3	90	14·5	115	11·8
2	69	26·4	152	24·5	223	23·0
3	45	17·2	109	17·6	207	21·3
4	43	16·4	104	16·7	147	15·1
5	27	10·3	73	11·7	119	12·3
6	21	8·1	38	6·1	69	7·1
7	14	5·4	24	3·8	46	4·7
8	9	3·4	23	3·7	24	2·4
9	1	0·4	6	0·9	4	0·4
10	0	0	1	0·1	9	0·9
11	0	0	1	0·1	6	0·6

The resources of the Committee under the scheme outlined for possible rehousing comprise :—

- (1) the vacant land in the White Abbey Area, which will provide accommodation for 558 persons ;
- (2) the land, or part of the land to be cleared in Broomfields, which might provide accommodation for 2,000 persons ; and
- (3) such of the land in the Wapping Area as the City Architect considers suitable for rehousing.

The Broomfields Area could only be made to accommodate 2,000 persons by building houses at something like 30 per acre, and in these circumstances they would require to be in tenement form.

This would leave a matter of 7,400 persons still to be provided for, or 1,500 houses to be erected in some other convenient part of the City. About 100 acres of land would therefore be required in order to carry out this programme.

Finance.

The Local Authority is involved financially to a very small extent in the actual clearing and demolition. They only become financially involved in rehousing proposals. A Government subsidy equivalent to £11 5s. per annum for a non-parlour house with three bedrooms is promised under the Housing Act, 1930. This subsidy is paid by the Ministry for displaced tenants rehoused, and unless it is the intention of the Corporation to rehouse these displaced tenants it is little use going on with any Clearance Scheme. Any Local Authority carrying out a Clearance Scheme must, in effect, offer houses to the displaced tenants. This should be a primary consideration by the City Council, especially having regard to the experience in connection with the White Abbey Area Improvement Scheme.

The object of this increased Government subsidy is to make it possible to let the substituted houses at lower rents, and the Ministry's calculations with regard to the rents at which these houses should be let are based, not only on a Government subsidy of £11 5s. per annum, but on a subsidy from the local rates amounting to £3 15s. per annum. This £3 15s. per annum per substituted house represents the liability of the Local Authority, which cannot be reduced without the consent of the Minister of Health (Housing Act, 1930. Sec. 27 (1) (c) (ii).)

The financial liability of the Local Authority in this Slum Clearance and reconditioning scheme may be taken to be equal to at least £7,500 per annum.

This report is drawn up to show the minimum requirements of slum clearance and reconditioning in the City to-day. It indicates a very large amount of work to be done. It would be easy to put this work in a five years' programme, but to carry it out is a much more difficult matter.

If slum clearance is to succeed to the fullest extent some way of developing the land laid waste must be found, and this is particularly true of the Wapping Area.

In response to the Circular of the Ministry of Health it is recommended :—

- (1) That the Council inform the Minister of Health of the areas proposed for slum clearance and reconditioning schemes.
- (2) That instructions be given for the preparation of slum clearance orders forthwith for submission to the Minister of Health in respect of Exchange Areas “ A ” and “ B.”
- (3) That a scheme be prepared for the slum clearance of the Broomfields Area and the erection of tenement property thereon.
- (4) That additional and centrally situated land be acquired to provide suitable accommodation for tenants displaced under slum clearance and reconditioning schemes.
- (5) That the consideration of the utilisation of the Wapping site be deferred pending the submission of the City Architect's report thereon.

The above Report was presented to the City Council on the 24th October, 1933, and the recommendations therein were approved.

HOUSING STATISTICS, 1933.

Total number of new houses erected during the year	1,141
(i) By the Local Authority	18
(ii) By other Local Authorities	—
(iii) By other bodies and persons	1,123

I. Inspection of dwelling-houses during the year.

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	11,695
(b) Number of inspections made for the purpose	46,384
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	1,918
(b) Number of inspections made for the purpose	20,244
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	624
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be all respects reasonably fit for human habitation	4,501

II. Remedy of Defects during the year without service of formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1,767
---	-------

III. Action under Statutory Powers during the year.

A. Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	744
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) by owners	639
(b) by Local Authority in default of owners	17

B. Proceedings under Public Health Acts.

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3,207
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) by owners	3,161
(b) by Local Authority in default of owners	20

C. Proceeding under Sections 19 and 21 of the Housing Act, 1930.

(1) Number of dwelling-houses in respect of which demolition orders were made	70
(2) Number of dwelling-houses demolished in pursuance of demolition orders	41
(3) Number of dwelling-houses demolished by owners in pursuance of scheme under Section 19	16
(4) Number of dwelling-houses in respect of which undertakings were given that houses would not be used for human habitation	24
(5) Number of dwelling-houses in respect of which undertakings were given that houses would be rendered fit for human habitation	514
(6) Number of dwelling-houses in respect of which undertakings were complied with to the satisfaction of the Local Authority	97

D. Proceedings under Section 20 of the Housing Act, 1930.

(1) Number of separate tenements or underground rooms in respect of which closing orders were made	—
(2) Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit	—

IX.—MISCELLANEOUS.

(A) **GENERAL DENTAL WORK.**

DENTAL CLINIC, 22 EDMUND STREET.

REPORT OF THE DENTAL OFFICER, H. P. SHOESMITH, L.D.S.

I have the honour to present the Annual Report for the year ended 31st December, 1933.

The dental work carried out under the auspices of the City of Bradford's Health Committee has followed the practice of previous years and continues to fill a great public need.

The importance of educating the public to become dentally minded is obvious, and by means of chair-side talks every opportunity is taken of impressing upon the patients the necessity of having a clean mouth.

The improvement in general health after the removal of septic roots and stumps is remarkable, although only natural when it is realised that the mouth is the gateway to the entire system.

During the last year St. Luke's Hospital has been visited twice weekly; Bierley and Grassington Sanatoria have been visited every four or five weeks. The Mental Institutions have been visited bi-annually, but at the time of this Report (May, 1934) the increase of patients at Westwood involves a weekly visit.

Patients from the Institutions under the authority of the Public Assistance Committee have been attended at the Clinic and also treated at the Institutions when necessary. A considerable amount of denture work has been done for the Public Assistance Committee.

Ante-natal patients from St. Luke's Hospital and Edmund Street continued to attend in large numbers and were amenable to treatment.

The treatment of the pre-school children occupied a considerable amount of time and the parents of these little ones were most appreciative.

In conclusion I wish to record my appreciation of the services of my nurse, Miss French, and all those at the different Institutions, whose assistance has been most helpful.

A tabular state of the work is given on page 152.

(B) AMBULANCE WORK AND DISINFECTION.

The ambulance facilities for the city are as follows :—At the City Fever Hospital there is provided a motor ambulance, which during 1933 removed 1,794 cases to Hospital. At the Municipal General Hospital three motor ambulances are provided, which in addition to removing cases to the General Hospital, also removed cases to Bierley Hall Sanatorium and the voluntary institutions in the city. The police maintain a motor ambulance for street casualties. Two motor ambulances are maintained for the removal of physically defective children to school, and one motor ambulance is maintained at Grassington for the removal thereto of cases of Pulmonary Tuberculosis.

The total number of articles disinfected at the Disinfecting Station, Canal Road, was 6,214, as against 5,972 last year. The number of houses disinfected by the Disinfecting Officer was 2,219, as against 2,013 last year. In addition disinfection was carried out at the request of manufacturers, property owners, and others, for which charges were made amounting to £52 14s. 4d. The revenue from this source last year was £56 3s. 8d.

(C) PUBLIC MORTUARY AND CREMATORIUM.

During the past year 122 bodies have been deposited and 37 post-mortem examinations made in the Public Mortuary. Since the opening in October, 1910, 2,210 bodies have been deposited.

The remains of 101 persons were cremated during 1933 at the Scholemoor Crematorium, in comparison with 123 during the previous year.

The table on page 153, prepared by the Cremation Society, shows the number of Cremations carried out in Great Britain since the year 1885.

TABLE SHOWING WORK CARRIED OUT AT THE DENTAL CLINIC DURING THE YEAR.

Source	Number of Patients	Number of Patient's Visits	Temporary Teeth Extracted	Temporary Teeth Filled	Permanent Teeth Extracted	Permanent Teeth Filled	Scalings	Dentures Repairs, etc.	Gas, Ether and Chloroform	Other Operations		
										Root Cases	Dressings &	Crowns & Regs
St. Luke's Hospital	318	680	59	—	1456	47	28	71	124	—	154	—
Tuberculosis Scheme ...	237	278	54	—	208	31	15	11	26	1	54	—
Maternity	208	514	—	—	1035	32	12	69	150	5	218	—
Infants & young Children ...	538	588	1221	99	—	—	6	—	408	—	9	—
School Children ...	21	57	3	—	2	14	—	11	—	6	55	3
Mental Institutions	50	54	1	—	55	22	23	2	3	—	3	—
Public Assistance	90	301	—	—	373	—	7	82	39	—	210	—
Totals ...	1462	2472	1338	99	3129	146	91	246	750	12	703	3

Table of Cremations carried out in Great Britain since the year 1885.

Crematorium	1885	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	Total
Woking	3693	124	153	125	129	142	181	149	159	193	170	235	271	305	320	344	426	446	476	446	447	8934	
Manchester	1907	184	165	179	178	197	235	203	228	189	227	251	287	303	357	367	443	442	508	626	674	8150	
Glasgow	484	57	63	65	65	74	84	80	87	75	90	87	116	98	129	141	172	121	158	165	202	2613	
Liverpool	669	48	54	58	62	69	89	69	75	74	62	74	75	96	101	103	103	160	163	171	247	2622	
Hull	277	16	34	25	24	43	46	30	43	45	45	47	42	55	70	72	97	84	128	126	148	1497	
Darlington	100	11	16	10	15	17	26	18	20	17	21	28	32	33	38	39	56	52	62	77	128	816	
Golders's Gr'n†	4158	671	730	633	719	820	919	851	893	939	920	1114	1214	1270	1459	1483	1797	1787	1866	2245	2396	28884	
Leicester	142	7	22	23	30	42	36	32	36	23	36	40	57	70	68	61	124	119	89	94	122	1273	
Birmingham	329	53	45	63	49	64	76	72	78	98	75	97	126	128	150	157	205	180	257	307	395	3004	
Leeds	159	28	20	22	17	34	30	26	31	31	27	47	48	40	59	60	66	73	109	116	153	1196	
Ilford†	189	42	45	43	68	70	68	58	57	70	69	68	66	84	95	103	99	112	112	158	192	1868	
BRADFORD	96	18	12	11	10	20	31	20	24	25	23	24	32	32	50	45	47	49	77	123	101	870	
Sheffield	106	20	21	14	25	50	41	32	29	38	37	32	48	43	57	51	81	59	87	84	108	1063	
Norwood†	—	—	31	89	118	153	169	156	162	186	178	240	266	299	279	306	410	390	415	480	624	4951	
Hendon Park†	—	—	—	—	—	—	—	—	—	6	8	7	7	8	11	11	14	12	13	13	10	120	
Pontypriidd	—	—	—	—	—	—	—	—	—	—	—	4	14	13	22	20	28	40	43	51	84	319	
Bristol	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	71	116	143	177	237	300	1044	
Ipswich	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	37	55	68	94	120	376	
Edinburgh	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	125	169	266	359	939	
Brighton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	78	144	263	300	785	
Guernsey	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	4	9	20	39	
Nottingham...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	70	74	90	234	
Southampton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	77	193	270	
Reading	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	67	80	
— London	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
† London	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	12039	1279	1411	1360	1509	1795	2031	1796	1922	2009	1988	2395	2701	2877	3265	3436	4341	4533	5195	6315	7480	71947	

APPENDIX.

TABLE I.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1933 AND PREVIOUS YEARS.

YEAR.	Popu- lation estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un- corrected Numbers.	NETT.		Number.	Rate.	of Non- residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett. Births.		
1928	288,500	4471	4421	15.32	3875	13.43	192	242	307	69	3925	13.60
1929	289,200	4396	4347	15.03	4516	15.62	215	227	346	80	4528	15.66
1930	293,254	4445	4376	14.92	4073	13.63	233	180	327	75	4020	13.45
1931	300,900	4167	4081	13.56	4437	14.75	321	161	292	71	4277	14.21
1932	296,300	4163	4019	13.56	4259	14.37	304	162	302	75	4117	13.89
1933	295,100	4033	3901	13.22	4482	15.18	318	168	310	79	4332	14.68

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1933.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.														Total Cases Removed to Hospital.										
	At all Ages.	At Ages—Years.					Allerton.	Bolton.	Bradford Moor.	Clayton.	East.	East Bowling.	Eccleshill.	Exchange.	Great Horton.	Heaton.	Idle.	Listerhills.	Little Horton.	Manningham.		North.	North Bierley East.	North Bierley West.	South.	Thornthorn.	Tong.	West.	West Bowling.		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.																								45 to 65.	Over 65.
Smallpox ...	...	—	—	—	—	—	18	7	24	10	7	32	14	5	36	12	1	39	19	29	12	23	21	16	7	8	17	23	338		
Diphtheria ...	380	11	108	198	37	25	1	2	10	3	10	4	8	1	12	5	3	5	21	20	10	15	3	4	3	2	10	15	67		
Erysipelas ...	171	6	2	12	52	71	26	5	2	10	3	10	4	8	1	12	5	3	5	21	20	10	15	3	4	3	2	10	15	67	
Scarlet Fever ...	997	17	294	551	75	54	6	46	53	68	22	52	45	46	1	99	37	66	45	40	68	29	80	32	27	30	20	30	61	794	
Enteric Fever ...	17	—	1	3	8	3	1	—	1	2	—	1	—	3	—	1	—	—	3	1	4	—	1	—	1	—	—	—	—	—	
Puerperal Fever ...	17	—	—	—	7	10	—	1	1	—	—	—	—	—	—	—	—	—	2	9	—	—	—	—	—	—	—	—	—	17	
Puerperal Pyrexia ...	44	—	—	—	20	24	—	2	—	3	1	2	2	4	1	—	—	—	1	6	8	3	3	—	1	4	1	2	—	35	
Cerebro-Spinal Meningitis ...	10	1	1	3	3	—	—	—	—	—	1	—	1	—	—	2	—	—	—	—	—	1	—	1	—	—	—	—	—	6	
Polio-myelitis ...	18	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	9	
Opth. Neonatorum ...	4186	210	2340	1614	16	5	1	94	60	309	75	311	256	239	100	269	172	21	231	279	176	313	136	125	294	116	89	115	406	128	
Measles ...	125	9	43	66	6	1	—	3	4	3	—	2	6	4	—	1	8	1	4	1	51	4	7	—	2	7	—	11	6	13	
German Measles ...	697	59	385	251	—	1	1	85	16	77	—	38	19	26	5	34	45	34	15	12	70	25	72	30	35	6	13	27	13	26	
Whooping Cough ...	1646	49	613	945	25	14	—	132	24	183	14	100	110	28	22	77	74	16	117	97	112	37	174	50	66	14	25	72	102	39	
Chicken Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	305	—	7	16	71	123	82	6	7	10	14	3	14	27	5	10	17	7	8	25	16	27	25	11	9	23	4	6	15	22	—
Other forms of Tuberculosis ...	124	3	22	53	21	20	4	1	4	3	10	2	10	5	4	2	7	1	—	12	13	6	8	3	3	11	2	1	8	9	—
Infective Enteritis ...	61	15	20	20	4	1	1	—	—	—	—	3	—	—	3	—	—	—	26	18	—	3	3	1	4	—	—	—	—	—	8
Anthrax ...	4	—	—	—	1	2	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lethargica ...	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Pneumonia ...	636	71	187	102	42	105	82	47	20	23	45	1	36	30	8	10	26	30	14	51	93	42	55	46	13	23	3	21	22	24	296
Malaria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ...	12	—	4	2	3	1	1	—	1	1	—	—	—	—	—	—	—	—	2	1	1	—	—	—	—	2	—	—	—	—	6
TOTALS ...	9454	469	4029	3828	351	441	253	83	417	206	749	132	587	539	392	163	579	396	166	582	628	615	526	575	290	512	194	189	331	686	1794

TABLE III.
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE DURING THE YEAR 1933.

Causes of Death		All Ages	0 to 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards
All Causes...	...	4332	310	59	71	82	109	166	248	471	803	1112	901
Typhoid and Paratyphoid Fevers	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	28	6	11	10	1	—	—	—	—	—	—	—
Scarlet Fever	...	6	—	—	4	1	—	—	—	—	—	—	—
Whooping Cough...	...	10	5	3	2	—	—	—	—	—	—	—	—
Diphtheria	...	15	1	1	3	8	—	—	—	—	—	—	—
Influenza	...	181	7	4	2	3	10	8	14	23	31	40	39
Encephalitis Lethargica	...	3	—	—	—	1	—	1	—	—	—	—	—
Cerebro-spinal Fever	...	7	2	1	—	—	2	1	—	—	—	—	—
Other Causes of Respiratory System	...	222	—	—	—	6	28	52	53	43	32	7	1
Other Tuberculous Diseases	...	39	6	6	8	4	—	2	4	2	—	—	—
Syphilis	...	11	1	—	—	—	—	—	—	—	—	—	—
General Paralysis of the Insane, Tabes Dorsalis	...	18	—	—	—	—	—	—	—	—	—	—	—
Cancer, Malignant Disease	...	504	1	—	—	—	—	8	33	85	156	165	56
Diabetes	...	44	—	—	—	—	2	—	4	6	13	11	8
Cerebral Haemorrhage, etc.	...	281	—	—	—	—	—	3	2	19	64	114	79
Heart Disease	...	1127	—	—	—	7	9	29	33	93	232	404	320
Aneurysm	...	9	—	—	—	—	—	—	2	2	2	2	1
Other Circulatory Diseases	...	182	—	—	—	—	—	1	1	15	29	72	72
Bronchitis...	...	168	10	—	—	—	—	2	4	23	23	41	73
Pneumonia (all forms)	...	249	56	17	20	6	11	9	16	34	28	31	21
Other Respiratory Diseases	...	32	—	1	—	1	1	3	9	9	9	4	5
Septic Ulcer	...	52	—	—	—	2	—	—	7	12	15	10	3
Diarrhoea, etc.	...	41	32	2	—	1	3	—	—	—	2	2	1
Appendicitis	...	27	—	—	2	5	3	3	3	8	2	1	—
Cirrhosis of Liver	...	12	—	—	—	—	—	—	—	2	2	1	—
Other Diseases of Liver, etc.	...	28	—	—	—	—	—	—	2	2	3	3	2
Other Digestive Diseases	...	71	7	—	—	—	3	3	4	9	7	7	3
Acute and Chronic Nephritis	...	140	—	1	4	2	3	2	7	26	14	16	11
Puerperal Sepsis	...	13	—	—	—	—	3	4	1	—	31	48	21
Other Puerperal Causes	...	8	—	—	—	—	4	4	5	—	—	—	—
Congenital Debility, Premature Birth, Malformations, etc.	...	152	144	3	1	2	1	—	—	—	1	—	—
Senility	...	144	—	—	—	—	—	—	—	—	—	—	—
Suicide	...	47	—	—	—	—	—	5	10	10	16	27	116
Other Violence	...	142	2	5	4	15	10	15	10	12	20	4	2
Other Defined Diseases	...	262	30	—	11	15	12	11	24	29	47	28	31
Causes ill-defined or unknown	...	57	—	—	—	—	—	—	1	7	10	29	10

TABLE IV.

INFANT MORTALITY, 1933. NETT DEATHS FROM STATED CAUSES
AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSES OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under 1 year.
Smallpox	—	—	—	—	—	—	—	—	—	—
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	1	—	2	3	6
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	1	1	1	2	5
Diphtheria and Croup	—	1	—	—	1	—	—	—	—	1
Erysipelas	—	—	—	—	—	2	1	—	—	3
Tuberculous Meningitis	—	—	—	—	—	—	—	1	3	4
Tuberculosis of Intestines and Peritoneum	—	—	—	—	—	1	—	—	—	1
Other Tuberculous Diseases	—	—	—	—	—	1	—	—	—	1
Meningitis (<i>not Tuberculous</i>)	—	1	—	1	2	—	1	1	1	5
Convulsions	3	—	1	—	4	2	1	3	1	11
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	3	5	1	1	10
Pneumonia (all forms)	—	—	2	1	3	11	17	15	10	56
Diarrhoea and Enteritis	—	1	2	1	4	6	10	4	8	32
Gastritis	—	—	—	—	—	2	1	—	—	3
Syphilis	—	1	—	—	—	—	—	—	—	1
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—	—	—	1	—	—	1
Injury at birth	3	1	—	—	4	—	—	—	—	4
Atelectasis	5	1	1	1	8	—	—	—	—	8
Congenital Malformations	9	2	4	—	15	4	5	—	1	25
Premature Birth	45	5	4	4	58	5	—	—	—	63
Atrophy, Debility and Marasmus	16	2	3	—	21	11	10	1	—	43
Other Causes	2	—	2	—	4	4	8	8	3	27
All Causes	83	15	19	8	125	54	61	37	33	310

Nett Births in the year—Legitimate, 3961; illegitimate, 210.

Nett Deaths in the year—Legitimate infants, 281; illegitimate infants, 29.

TABLE V.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

Summary of Notifications during the period from 1st January, 1933, to the 31st December, 1933.

NUMBER OF NOTIFICATIONS ON FORM A													
AGE PERIODS	Primary Notifications											Total Notifications (i.e., including cases previously notified by other doctors)	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards		Total
Pulmonary:—													
Males ...	—	5	2	4	13	22	35	34	34	27	6	182	209
Females ...	—	2	5	5	14	22	26	28	14	7	—	123	131
Non-pulmonary:—													
Males ...	2	17	11	13	6	2	4	5	1	2	—	63	71
Females ...	1	5	15	14	9	4	9	2	—	1	1	61	68

COMMITTEES

HEALTH COMMITTEE.

THE RIGHT HONOURABLE THE LORD MAYOR.

Chairman—ALDERMAN H. T. PULLAN.

Deputy Chairman—ALDERMAN L. F. W. S. SMITH.

Alderman W. Donoghue.	Councillor D. Black.
„ S. Horsfall.	„ F. V. Butler.
„ G. T. Meggison.	„ E. Fox.
„ A. H. Rhodes.	„ T. Keighley.
„ T. J. Robinson.	„ W. A. Leach.
„ A. T. Sutton.	„ J. Lennon.
„ M. F. Titterington.	„ W. A. Ross.
Councillor J. J. Bell.	„ J. W. Turner.

SPECIAL ELEMENTARY EDUCATION SUB-COMMITTEE *RE* MEDICAL AND NURSERY SCHOOLS.

Chairman—ALDERMAN L. F. W. S. SMITH.

Alderman W. Hindle.	Councillor R. C. Ruth.
„ A. Pickles.	„ J. R. Singleton.
„ H. T. Pullan.	„ D. H. Waterhouse.
Councillor J. J. Bell.	„ J. T. Waterhouse.
„ T. I. Clough.	„ W. Smith.
„ H. Drake.	„ H. J. Wilson.
„ E. Fox.	Mrs. G. Smithies.
„ W. Leach.	Mrs. W. Leach.
„ J. H. Palin.	Mrs. C. E. Hindley.

JOINT HEALTH AND EDUCATION (CO-ORDINATION) SUB-COMMITTEE.

Chairman—ALDERMAN H. T. PULLAN.

Deputy Chairman—ALDERMAN L. F. W. S. SMITH.

Councillor F. V. Butler.	Councillor D. H. Waterhouse.
„ T. Keighley.	„ J. R. Singleton.
„ J. T. Waterhouse.	Mrs. Leach.
	Mrs. Smithies.



CITY OF BRADFORD

ANNUAL REPORT
OF THE
SCHOOL MEDICAL OFFICER
1933

9.—Sanitary Conveniences:—					
(a) Lavatories,	Satisfactory	...	...	106	59
	Unsatisfactory	...	...	3	3
	Satisfactory, but insufficient	...	...	5	3
	(b) W.C.'s Trough System, Satisfactory	...	...	77	37
	Unsatisfactory	...	...	19	14
	Satisfactory, but insufficient	...	...	6	6
	Automatic Flush	...	...	9	8
	Individual Automatic Flush	...	...	2	—
	Pail System, Unsatisfactory	...	...	1	—
(c) Urinals,	Satisfactory	...	...	70	49
	Satisfactory, but insufficient	...	...	9	3
	Unsatisfactory	...	...	9	4
	Hand-flushed, Unsatisfactory	...	...	11	10
10.—Playgrounds,	Satisfactory	...	...	91	21
	Satisfactory, but inadequate	...	...	8	13
	Unsatisfactory	...	...	15	31

A comparison of this Table with the one given in the 1932 Report shows very little change. During the years 1930 and 1931 a large number of improvements in Buildings, Lighting, Desks, Lavatories, Playgrounds, etc., were carried out.

4. MEDICAL INSPECTION.—(a) During the year 1933, a Routine Medical Inspection was carried out in every School in Bradford. The numbers of children examined in the three Code Groups show an increase of 1,128 over the number examined in 1932; and those in Other Routine Inspections show a decrease of 29 in Elementary Schools, an increase of 150 in Nursery Schools, a decrease of 28 in Special Schools and an increase of 24 in Secondary Schools, making a net increase in the total Routine Inspections of 1,220.

Special Inspections of Elementary School children show a decrease of 381 in the number of children inspected, and a decrease of 527 Re-inspections. Secondary Schools show a decrease of 9 inspected, and 217 re-inspected, making a net decrease of 1,134 in the total number of Special Inspections, and Re-inspections.

The classes of children medically inspected, with the numbers in each class examined, are as follows:—

(1) Children admitted for the first time during the year (Entrants)	...	...	...	...	...	4246
(2) Children 8 years of age (Intermediates)	...	...	...	...	...	4033
(3) Children expected to leave School during the year (Leavers)	...	...	...	...	...	3370
(4) Other Ages	...	...	...	...	...	920
(5) Children attending Council Secondary Schools and Bradford Grammar Schools	...	...	...	...	...	4470
(6) Candidates for Secondary Schools	...	...	...	...	...	1065

(7) Children attending Nursery Schools	480
(8) Children attending Special Schools	255
Total	18,839

(b) There has been no material departure made from the Board's schedule of inspections.

(c) Grave defects are in a large number of cases recognised in Bradford before the children arrive at School age through the agency of notification, health visitors, maternity and child-welfare centres and the like. On admission to School all grave defects noted by the School Teachers are notified to the School Medical Officer, and the children examined at once. A census of all children in the City of school age is taken biennially by the School Attendance Officers, and children who have reached five years of age and whose names are not on any School Register for mental or physical reasons, are reported to the School Medical Officer, who has each case either medically examined at the Clinic or obtains satisfactory medical evidence that the child is not fit to attend School. Many of these cases are treated at the School Clinics or Hospitals under the Authority's Scheme.

5. FINDINGS OF MEDICAL INSPECTION :—

CLOTHING AND FOOTGEAR.—Records of the 18,839 children examined at the Routine Medical Inspections during the year again show a very low percentage of children found to have inadequate or unsuitable clothing.

The following Table records the findings of the School Medical Officers at the Routine Inspections:—

Code Group	Numbers Inspected	Clothing Inadequate or unsuitable				Footgear Inadequate or unsuitable			
		B	G	T	%	B	G	T	%
Entrants	4246	1	—	1	0·02	—	1	1	0·02
Intermediates	4033	1	—	1	0·02	3	—	3	0·07
Leavers	3370	—	1	1	0·03	1	—	1	0·03
Other Ages... ..	920	—	—	—	—	—	—	—	—
Special Schools	255	—	—	—	—	—	—	—	—
Junior Scholarships	1065	—	—	—	—	—	—	—	—
Secondary Schools...	4470	—	—	—	—	—	—	—	—
Nursery Schools	480	—	—	—	—	—	—	—	—
Totals	18839	2	1	3	0·02	4	1	5	0·03

(a) MALNUTRITION.—The percentage of children found to be below normal Nutrition at the Routine Medical Inspections during 1933 gives a decrease of 1·55 per cent. on the number found in 1932, 2·97 per cent. having been found below normal in 1933, as against 4·52 per cent. in 1932, and 7·02 in 1931. At the Special Inspections held at the School Clinics, 351 Elementary and 14 Secondary School children were found to be suffering from this condition, against 485 Elementary and 9 Secondary in the year 1932. The following Table records the findings of the School Medical Officers at the Routine Inspections:—

Code Group	Numbers Inspected	Boys				Girls			
		Above Normal	Normal	Below Normal	Emaciated	Above Normal	Normal	Below Normal	Emaciated
Entrants ...	4246	277	1770	44	—	322	1740	57	—
Intermediates ...	4033	264	1660	83	—	385	1517	83	—
Leavers ...	3370	379	1224	54	—	417	1209	62	—
Other Ages...	920	56	359	18	—	101	338	20	—
Special Schools ...	255	15	93	4	—	23	115	4	—
Junior Scholarships	1065	78	418	21	—	126	396	17	—
Secondary Schools...	4470	627	1681	59	—	167	1870	6	—
Nursery Schools ...	480	11	152	10	—	21	145	18	—
Totals ...	18839	1707	7357	293	—	1562	7330	267	—

(b) UNCLEANLINESS.—It is again gratifying to note that the gradual improvement which has taken place for a number of years in the cleanliness of children has been maintained. The following Table of Routine Inspections records that out of 18,839 children inspected, only 5 boys and 34 girls were found to have uncleanness of head, 0·21 per cent., and 9 boys and 5 girls uncleanness of body, 0·07 per cent.

The percentages for the eight years previous show the improvement:—

1932 Head 0·16,	Body 0·16.	1928 Head, 0·72,	Body 0·34
1931 „ 0·44,	„ 0·24.	1927 „ 0·92,	„ 0·54
1930 „ 0·59,	„ 0·37.	1926 „ 2·01,	„ 1·62
1929 „ 0·60,	„ 0·31.	1925 „ 3·48,	„ 2·37

In taking a review of the question of uncleanness one must not lose sight of the fact that when a Routine Inspection is going to take place in any school, the parent receives a notification that the child is going to be inspected and in most cases the children are sent cleaner on the day the inspection is to take place than on other days. A more reliable figure respecting uncleanness is got from the Nurses' Inspections re cleanliness, which will be found in paragraph 6 (Following-Up).

When a nurse goes to a school to inspect the children re cleanliness, the parent has received no notice, is not present and the child is seen unprepared.

From the record of the Nurses' Inspections it will be found that 4,428 cases of uncleanness of head were found, 428 of uncleanness of body, against 4,461 and 435 in 1932, and 6,628 and 958 in 1931.

Code Group	Numbers Inspected	Head				Body			
		B	G	T	%	B	G	T	%
Entrants ...	4246	3	6	9	0·21	2	1	3	0·07
Intermediates ...	4033	—	15	15	0·37	2	2	4	0·10
Leavers ...	3370	—	6	6	0·18	2	2	4	0·12
Other Ages ...	920	2	—	2	0·22	1	—	1	0·11
Special Schools ...	255	—	—	—	—	—	—	—	—
Junior Scholarships	1065	—	—	—	—	—	—	—	—
Secondary Schools	4470	—	7	7	0·16	1	—	1	0·02
Nursery Schools ...	480	—	—	—	—	1	—	1	0·21
Totals ...	18839	5	34	39	0·21	9	5	14	0·07

(c) MINOR AILMENTS AND DISEASES OF THE SKIN.—It will be seen from Table IV, Group 1, that 9,150 defects in Elementary, Special and Nursery School children, and 593 defects in Secondary School children were treated at the School Clinics during the year 1933, against 10,008 Elementary and 473 Secondary in 1932, a decrease of 858 Elementary and an increase of 120 Secondary.

At the Routine Inspections 459 Elementary, Special and Nursery and 129 Secondary School children were found with Skin Diseases; 437 Elementary and 112 Secondary were referred for treatment, whilst 22 Elementary and 17 Secondary required to be kept under observation.

At the Special Inspections, 1,757 Elementary and 85 Secondary School children were found; 1,751 Elementary and 85 Secondary required treatment and 6 Elementary observation only. These figures show a net increase of 6 children found with skin diseases compared with those of 1932.

Particulars as to the diseases from which these children suffered will be found in Table II, and those treated in Table IV, Group 1.

(d) VISUAL DEFECTS AND EXTERNAL EYE DISEASE.—It will be noticed from Table II that 816 Elementary, 4 Special and 635 Secondary School children were found at the Routine Inspections to require treatment for Defective Vision, and 110 Elementary, 1 Special, 11 Nursery and 4 Secondary School children to require treatment for Squint. At the Special Inspections, 1,533 Elementary, 222 Special and 460 Secondary School children were referred for treatment of Vision and 191 Elementary, 5 Special, 6 Nursery and 3 Secondary School children were referred for treatment of Squint. (The figures in the Special Schools include the children treated at the Myope School.)

Although the figures vary in the Groups from those of 1932, the total number referred from all classes is very similar. The total number referred for treatment for Defective Vision and Squint from Elementary Schools was 2,650, and it will be noticed from Table IV, Group II, that 2,573 defects were dealt with. The latter figure includes re-inspections.

The number referred from Secondary Schools was 1,102, and 822 defects were dealt with. The cause of the latter figure being so low was on account of five large Secondary Schools being inspected during November and December, and the defects not being dealt with until January, 1934.

The reason for the numbers under the heading of Special Inspections being so much larger than those found at Routine Inspections is that the vision of all Elementary School children, who do not come within the Code Groups for Medical Inspection, is tested annually at the School by the Nurses, and if they cannot read the Snellen's Test at 6/12, they are referred to the School Clinic for a further test by the Medical Officer.

209 Elementary, 32 Secondary, 22 Special and 13 Nursery School children were found at the Routine Inspections to be suffering from External Eye Disease, whilst 585 Elementary, 33 Secondary, 56 Special and 8 Nursery School children were discovered at the Special Inspections held at the School Clinic. These figures make a total of 958 against 998 found in 1932.

It will also be found in paragraph 6*b* that 305 external eye defects were discovered by the Nurses, most of which come under the heading of Special Inspections at the School Clinics. A number of these cases are also referred to the School Clinics by Attendance Officers and Teachers.

(*e*) NOSE AND THROAT DEFECTS.—At the Routine Inspections 2,170 Elementary, 282 Secondary, 21 Special and 226 Nursery School children were found with Enlarged Tonsils, or Tonsils and Adenoids, of whom 1,683 Elementary, 149 Secondary, 12 Special and 160 Nursery School children were referred for treatment. At the Special Inspections held at the School Clinics 325 Elementary, 15 Secondary, 17 Special and 7 Nursery children were found, of whom 316 Elementary, 14 Secondary, 15 Special and 5 Nursery children were referred for treatment.

These figures vary from those found in 1932 as follows:—Routine Inspections, Elementary, Special and Nursery, an increase of 258; Secondary, a decrease of 27; Special Inspections show decreases of 85 Elementary, Special and Nursery, and 14 Secondary School children. It will be noticed that the number referred for treatment from Routine Inspections in Elementary, Special and Nursery Schools was 1,855 against 1,305 in 1932, an increase of 550. This contributed largely to the increase of the percentages of children found to require treatment (see Table IIB.)

It will be noticed from Table IV, Group 3, that 594 Elementary, 18 Secondary, 10 Special and 34 Nursery School children received operative treatment for Tonsils and Adenoids, and 2 Elementary School children received operative treatment for other defects of the nose and throat. These figures show a decrease of 140 from those of 1932, but the figures of those who received other forms of treatment show an increase of 316. Of a total of 667 children, who are recorded to have received operations, 631 were by this Authority and 36 by Private Practitioners or at Hospital.

(f) EAR DISEASE AND HEARING.—From the Routine Inspections 192 Elementary and 36 Secondary School children were found to be suffering from ear diseases or defective hearing, of whom 173 Elementary and 25 Secondary were referred for treatment, and 19 Elementary and 11 Secondary placed under observation. At the Special Inspections 731 Elementary and 70 Secondary School children were found, of whom 725 Elementary and 70 Secondary were referred for treatment, and 6 Elementary were placed under observation.

The figures for the Routine Inspections show increases of 11 found, and 26 referred for treatment from Elementary Schools, and 7 found, and 2 referred for treatment from Secondary Schools. The figures for Special Inspections vary as follows:—Elementary Schools, a decrease of 67 found, and 68 referred for treatment; Secondary, increases of 33 found, and 34 referred for treatment. As in the case of External Eye Disease, most of the special cases found in the Schools by the Nurses are referred to the School Clinics; this accounts for the small numbers found at the Routine Inspections.

(g) DENTAL DEFECTS.—In addition to the annual inspection carried out by the School Dentists, the Doctors make an examination of each child's mouth at Routine Inspections. The numbers of children so found with dental defects during the past three years are shown in the appended Tables:—

1933	Numbers Inspected	Less than four teeth decayed	More than four teeth decayed	Oral Sepsis
Boys ...	9513	3390	145	2
Girls ...	9326	3198	153	2
Totals ...	18839	6588	298	4

1932	Numbers Inspected	Less than four teeth decayed	More than four teeth decayed	Oral Sepsis
Boys ...	9035	2689	264	6
Girls ...	8600	2780	339	8
Totals ...	17635	5469	603	14

1931	Numbers Inspected	Less than four teeth decayed	More than four teeth decayed	Oral Sepsis
Boys ...	9561	1915	233	2
Girls ...	8770	2558	253	8
Totals ...	18331	4473	486	10

(h) ORTHOPÆDIC AND POSTURAL DEFECTS.—The number of cases found at the Routine and Special Inspections of children suffering from Crippling Defects caused by Rickets, Spinal Curvature and other forms are shown in the undermentioned Table. In order to make the comparison in the figures for the past four years as clear as possible, those for Elementary, Special and Nursery Schools have been placed in one column. In the years 1930 and 1931 the figures for those Schools were all in one Table.

Defect or Disease	Elementary Special & Nursery Schools				Secondary Schools			
	Routine Inspection		Special Inspection		Routine Inspection		Special Inspection	
	No. of Defects		No. of Defects		No. of Defects		No. of Defects	
	For Treatment	For Observation	For Treatment	For Observation	For Treatment	For Observation	For Treatment	For Observation
1933 :—								
Deformities :—								
Rickets ...	64	77	2	1	25	51	—	1
Spinal Curvature	312	49	9	2	68	38	2	1
Other Forms ...	184	125	40	18	75	66	18	11
1932 :—								
Deformities :—								
Rickets ...	48	84	12	9	3	29	—	—
Spinal Curvature	239	47	11	3	66	37	14	2
Other Forms ...	114	115	37	33	68	62	—	2
1931 :—								
Deformities :—								
Rickets ...	51	73	8	6	14	18	—	—
Spinal Curvature	148	96	21	2	69	53	14	—
Other Forms	93	173	67	30	68	64	—	4
1930 :—								
Deformities :—								
Rickets ...	66	86	10	7	—	17	—	—
Spinal Curvature	193	35	40	2	51	32	18	2
Other Forms ...	110	168	73	31	115	100	—	1

Particulars showing the number of children who have received treatment at the Central School Clinic will be found on page 19 and those who have received treatment at Lister Lane School on page 39. The figures shown in Table IV, Group 4, under the heading of Elementary, Secondary and Nursery Schools include children who have received treatment at the Central Clinic and St. Luke's Hospital, those under Special Schools include children who have received treatment at the Central Clinic, St. Luke's Hospital and Lister Lane School. A record of the operative work performed at St. Luke's Hospital by the Orthopædic Surgeon will be found on page —.

(i) HEART DISEASE AND RHEUMATISM.—At the Routine Inspections during the year 1933, 143 Elementary, 23 Secondary, 1 Special and 5 Nursery School children were found to require treatment, and 43 Elementary, 25 Secondary and 4 Nursery School children were required to be kept under observation for Organic Heart Disease. There were also 10 Elementary, 2 Secondary and 6 Special School children (excluding those at the Lister Lane School for Physically Defectives), referred for treatment, and 11 Elementary, 2 Secondary, 11 Special and 1 Nursery for observation from the Special Inspections.

The aforementioned figures vary from those of 1932 as follows:—Routine Inspections, Elementary, an increase of 62 referred, and a decrease of 31 for observation; Secondary, an increase of 10 referred, and a decrease of 4 for observation. Special Inspections, Elementary, an increase of 6 referred, and a decrease of 19 for observation; Secondary, a decrease of 1 referred.

It is impossible to give any accurate figures for Rheumatism, as there is no specified space on the Medical Schedule for this defect. This defect is generally included under the heading of other conditions of Nervous System.

(j) TUBERCULOSIS.—12 Elementary School children were found at Routine Inspections to be suspected of Pulmonary Tuberculosis. At the Special Inspections held at the School Clinics, 9 Elementary School children were found with Definite Tuberculosis, and 81 Elementary, and 1 Secondary with Suspected Pulmonary Tuberculosis.

The above-mentioned figures total 102, against 87 in 1932, 60 in 1931, and 112 in 1930. Children suspected to be suffering from Tuberculosis are referred to the Anti-Tuberculosis Centre, where a Special Clinic is held each Thursday at 9.30 a.m. These cases are generally admitted to Grassington Sanatorium School, of which particulars will be found in paragraph 13, Section 2, pages 43 and 44.

There were 6 Elementary and 2 Secondary School cases of Non-Pulmonary Tuberculosis found at the Routine Inspections, 5 of which were referred for treatment. From the Special Inspections at the School Clinics, 30 Elementary and 1 Secondary School cases were found; 29 of them being referred for treatment and 2 for observation

only. These figures record a decrease of 4 Elementary found at Routine Inspections, and an increase of 10 Elementary at Special Inspections.

(k) OTHER DEFECTS AND DISEASES.—At the Routine Inspections 729 Elementary, 187 Secondary, 11 Special and 71 Nursery School children were referred for treatment, and 131 Elementary, 66 Secondary, and 11 Nursery were placed under observation, on account of defects and diseases, which are not mentioned under other headings in Table II.

At the Special Inspections, 3,352 Elementary, 163 Secondary, 175 Special and 9 Nursery were found, of whom 3,197 Elementary, 159 Secondary, 146 Special and 6 Nursery were referred for treatment.

Of the above, the actual number of children who received treatment at the School Clinics was as follows:—3,177 Elementary, 204 Secondary, 137 Special and 41 Nursery.

From the Routine Inspections in Elementary Schools, 9 children were referred for treatment and 7 required to be kept under observation, who were suffering from Epilepsy. From the Special Inspections, 12 Elementary School children were referred for treatment, and 13 were kept under observation; these figures total 39, compared with 34 in 1932. In addition to these there were 3 Secondary School children found at the Special Inspections, 1 requiring treatment, and 2 to be kept under observation.

6. FOLLOWING UP.—A review of this Authority's system for the following up of children suffering from the various defects, systematic re-inspections, and home visitation by the Nurses, has been given in previous Reports.

The records taken from the Nurses' weekly duty sheets show an increase over 1932 of 23 visits to Schools, 12,020 less examinations in Schools, and a decrease of 165 visits to homes. The number of defects discovered by the Nurses in Schools was 7,569 against 8,288 in 1932, a decrease of 719.

These decreases are caused by a reduction in the Staff of Nurses during the year 1932.

(a) RECORD OF VISITS FOR 1933.

(1) Visits to Schools	...	...	...	2326
(2) Children examined	...	...	...	160349
(3) Visits to Homes	...	...	...	1293

(b) DEFECTS DISCOVERED.

(1) Malnutrition	19	(7) Sore Eyes	305
(2) Uncleanliness (Head) ..	4428	(8) Defective Vision ...	117
(3) Uncleanliness (Body) ..	428	(9) Squint	89
(4) Ringworm	27	(10) Running Ears ...	281
(5) Scabies	18	(11) Infectious Diseases ...	18
(6) Impetigo	728	(12) Other Conditions ...	1109

7. ARRANGEMENTS FOR TREATMENT.—There are four School Clinics in Bradford, a Central Clinic at 28A Manor Row, and Branch Clinics at Green Lane, Lapage Street and Edmund Street. Under the co-ordination of medical work, arrangements have been made for the treatment of certain defects at places mentioned below:—

- (a) Minor Ailments ... School Clinics.
- (b) Tonsils and Adenoids Special Hospital, Leeds Road.
- (c) Tuberculosis Anti-Tuberculosis Centre and Grassington Sanatorium.
- (d) Skin Disease School Clinics.
- (e) External Eye Disease School Clinics, Ophthalmic Clinic, Edmund Street and Municipal General Hospital (St. Luke's).
- (f) Vision School Clinics, Ophthalmic Clinic, Edmund Street and Municipal General Hospital (St. Luke's).
- (g) Ear Disease and Hearing School Clinics and Special Hospital (Leeds Road).
- (h) Dental Defects ... Central Clinic.
- (i) Crippling Defects and Orthopædics ... Central Clinic, School for Physically Defectives, Lister Lane and Municipal General Hospital (St. Luke's).
- (j) Marasmus, Rickets, Anæmia, and Skin Diseases Central Clinic. U.V. and X-Rays.

The cases of defects that have attended the School Clinics since 1908 are shewn in the following table :—

Year	Treated	Examined only on first attendance	Total Attendances	Attendances per week
1908	841	590	4050	122
1909	2323	1325	14516	329
1910	3520	2772	19315	439
1911	5019	2655	20325	462
1912	6279	3095	25579	581
1913	8004	4333	34940	791
1914	13991	4155	46982	1068
1915	12469	2769	43346	985
1916	14559	3552	38051	865
1917	12890	3056	44289	1006
1918	9954	3164	35256	801
1919	16459	4177	44876	1019
1920	22114	5894	61565	1502
1921	25460	6364	75209	1791
1922	23718	4158	71663	1706
1923	20255	4811	71646	1706
1924	23013	6176	76476	1821
*1925	37850	7327	88111	2050
*1926	35007	9352	91477	2178
*1927	34180	8279	99449	2368
*1928	33031	9517	94080	2240
*1929	37613	9937	110333	2627
*1930	31961	7431	123514	2941
*1931	30509	8697	118793	2829
*1932	32512	7526	114397	2724
*1933	33467	4851	107918	2569

* Includes Dental Cases which were not included in the first two columns in previous years. This, of course, duplicates many of the cases, as children often come for both Medical and Dental treatment during the same year.

The following table records the attendances at the School Clinics during 1933 and includes cases referred from School Medical Inspection.

Defects or Diseases	Elementary School Children										Secondary School Children					
	New Cases					Old Cases					New Cases			Old Cases		
	To be kept under observation	Referred for treatment	Examined and treated	Total Attendances New Cases	To be kept under observation	Referred for treatment	Examined and treated	Total Attendances All Cases	To be kept under observation	Referred for treatment	Examined and treated	Total Attendances New Cases	To be kept under observation	Referred for treatment	Examined and treated	Total Attendances All Cases
Malnutrition ...	3	80	534	617	4	7	595	1223	—	1	36	37	—	—	37	74
Uncleanliness :—Head ...	—	—	100	100	—	—	100	200	—	—	1	1	—	—	1	1
Body ...	—	—	13	13	—	—	18	31	—	—	—	—	—	—	—	—
Skin :—Ringworm, Head ...	4	32	124	160	—	24	429	613	—	—	1	1	—	—	3	4
Ringworm, Body ...	—	5	85	90	—	1	204	295	—	—	2	2	—	—	3	5
Scabies ...	1	—	150	151	—	—	490	641	1	—	21	22	—	—	45	67
Impetigo ...	—	2	981	983	—	1	5199	6183	—	1	19	20	—	—	76	96
Other Diseases (Non T.B.) ...	4	9	770	783	1	3	2379	3166	—	—	98	98	—	—	299	397
Eye :—Blepharitis ...	—	1	255	256	—	2	660	918	—	—	14	14	—	—	13	27
Conjunctivitis ...	—	3	138	141	—	1	354	496	—	—	13	13	—	—	25	38
Keratitis ...	1	3	2	6	1	—	—	7	—	—	—	—	—	—	—	—
Corneal Ulcers ...	—	—	4	4	—	—	64	68	—	—	—	—	—	—	—	—
Corneal Opacities ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Defective Vision ...	114	631	2460	3205	80	231	3258	6774	17	97	775	889	13	12	866	1780
Squint ...	15	56	80	151	6	28	122	307	—	1	1	2	—	1	2	5
Other Conditions ...	11	15	391	417	2	3	552	974	—	—	19	19	1	—	11	31
Ear :—Defective Hearing ...	4	14	60	78	7	1	60	146	—	—	11	11	—	—	24	35
Otitis Media ...	1	4	507	512	—	6	6672	7190	—	1	32	33	—	—	389	423
Other Ear Diseases ...	2	7	235	244	—	1	313	558	—	1	40	41	—	—	29	70
Nose and Throat :—Enlarged Tonsils ...	8	80	456	544	—	32	3276	3852	1	1	25	27	—	2	53	82
Adenoids ...	2	9	48	59	—	2	87	148	—	—	3	3	—	—	3	4
Enlarged Tonsils and Adenoids ...	5	93	181	279	1	18	253	551	—	2	1	1	—	1	29	35
Other Conditions ...	6	26	1282	1314	16	11	4561	5902	—	3	78	81	—	—	289	370
Breathing Exercises ...	—	5	345	350	—	—	1277	1627	—	—	13	13	—	—	26	39

	1	2	3	5	6	7	8	9	10	11	12	13	14	15	16
Defective Speech	...	5	4	6	15	—	—	15	—	—	—	—	—	—	—
Heart and Circulation :—
Heart Disease :—Organic...	...	23	12	64	99	28	147	2	1	2	5	3	—	—	8
Functional	...	26	16	67	109	14	154	3	—	1	4	4	—	—	8
Anemia	...	13	208	780	1001	18	5854	1	4	56	61	1	—	411	473
Lungs :—Bronchitis	...	10	58	847	915	35	1998	—	2	11	13	—	1	18	32
Other Non-T.B. Diseases	...	7	29	574	610	2	821	—	—	16	16	—	—	39	55
Tuberculosis :—Pulmonary Definite ...	1	4	4	9	—	2	11	—	—	—	—	—	—	—	—
Pulmonary Suspected	15	38	34	87	67	10	17	1	—	—	1	1	—	—	2
Non-Pulmonary :
Glands	...	—	2	3	5	—	1	—	—	—	—	—	—	—	—
Spine	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hip ...	1	3	1	5	—	—	5	—	—	—	—	—	—	—	—
Other Bones & Joints	—	1	1	2	—	1	3	—	—	—	—	—	—	—	—
Skin	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Forms	...	—	14	7	21	—	16	1	—	—	1	—	—	—	1
Nervous System :—Epilepsy	...	16	6	8	30	—	38	2	—	1	3	1	—	2	6
Chorea	...	24	31	140	195	9	343	1	—	4	5	—	1	6	12
Other Conditions...	...	3	24	156	183	1	295	—	—	12	12	—	—	4	16
Deformities :—Rickets...	...	1	10	24	35	2	197	—	—	1	1	—	—	1	2
Spinal Curvature	...	2	18	122	142	1	1448	—	5	16	21	—	—	326	347
Other Forms	...	18	44	77	139	5	1284	1	14	21	36	—	5	264	305
Mental Condition	...	79	30	16	125	20	147	—	—	—	—	—	—	—	—
Infectious Diseases	...	64	49	188	301	8	364	—	—	3	3	—	—	—	3
Other Defects and Diseases	...	105	393	3151	3649	153	8542	4	21	201	226	10	5	181	422
Minor Ailments	3	42	552	5565	3	22418	1	7	323	331	—	5	775	1111
No Defect Found	...	513	—	—	513	—	513	50	—	—	50	—	—	—	50
Teeth :—Cases treated by appointment	...	—	—	3309	3309	—	3614	—	—	180	180	—	—	112	292
Emergency Cases (Casuals)	—	—	5851	5851	—	6500	—	—	682	682	—	—	192	874
Totals	...	1112	2122	30706	33940	482	55963930	86162	2761	3009	34	34	34	4561	7638

In addition to the attendances recorded in the preceding table, the following Medical Inspections were conducted at the School Clinic :

(1) Children examined as to their suitability for admission to Secondary Schools	...	...	...	...	...	<i>Elem.</i> 1065	<i>Secy.</i> —
(2) Re Bursarships	...	...	...	...	...	—	105
(3) From School of Art (Routine Medical Inspection)						—	82

The following Table shows the examinations made in connection with Special Schools, transference to Convalescent Homes, employment of children and continued attendance at School. These have been analysed under the defects found, or no defect found, and are all included in the previous Table.

Object of Examination	Number of Children	Total Attendances
Transference to Special Schools :—		
Mentally Defective	10	10
Blind, Deaf and Cripple	91	99
Thackley and Odsal Open-Air Schools	867	874
Transference to Convalescent Homes	483	528
Transference to Institutions	3	3
Continued attendance at Infants', Secondary and Special Schools :—		
Elementary Schools	20	20
Infants' Schools	4	4
Secondary Schools	16	16
Myope School	55	55
Open-Air Schools (Thackley and Odsal)	80	83
Lister Lane School for Physically Defectives	48	51
Margaret McMillan School for Mentally Defectives... ..	15	15
Bolton Royd Deaf School	5	5
Nursery Schools	2	2
Employment at Theatres... ..	75	76
Certificates for Trades (Printing etc.)	17	17
Certificates for Street Trading	3	3
Re Visits to France	18	18
Totals	1812	1879

Of the 483 children examined *re* transference to Convalescent Homes:—

383 were for Craig Home, Morecambe.

88 were for the Charity Organisation Society.

12 were for Cinderella Club.

EXCLUSIONS FROM SCHOOL.

During the year 15,509 exclusion notices have been issued from the following centres, compared with 14,129 in 1932, 15,181 in 1931, 16,257 in 1930 and 15,025 in 1929.

	1933	1932	1931	1930
Central School Clinic	1422	1474	2483	3082
Green Lane School Clinic	1657	1081	1340	1324
Lapage Street School Clinic	2879	2799	2632	2894
Edmund Street School Clinic	1323	1778	1391	1364
Health Visitors, Edmund Street	3655	3070	3324	3500
Special Hospital, Leeds Road	493	595	741	846
Anti-Tuberculosis Centre	97	197	296	322
Lister Lane School for Physically Defectives	35	45	25	42
Health Department	3948	3090	2949	2883
Totals	15509	14129	15181	16257

MEDICAL GYMNASTICS AND MASSAGE.

This treatment is carried out at the Central School Clinic and Lister Lane School for Physically Defectives.

The following tables give the number referred and the number treated at the Central School Clinic:—

Cases treated and discharged cured	388
Cases treated and discharged improved	43
Cases treated and referred to Lister Lane School for Physically Defectives for completion	11
Cases treated who left School (over age) before treatment was completed	5
Cases withdrawn from treatment by parents before completion	16
Cases treated and carried forward to 1934 for continued treatment	43
Total number of cases referred	506
Total number of attendances	Boys 2739 Girls 2599 Total 5338

Classification of the 506 cases treated :—

Disease	Number	Disease	Number
Scoliosis	47	Paralysis	17
Kyphosis	85	Recent Injuries	45
Chest Deformities	14	Post Tonsillectomy Cases	249
Foot Deformities ..	46	Rickets	3

The above figures show a decrease of 49 children treated, and a decrease of 210 attendances compared with the year 1932.

TINEA (RINGWORM) OF THE HEAD AND X-RAY TREATMENT.

X-Ray treatment for Ringworm of the Head still continues with the successful results that have been experienced ever since the apparatus was installed in the year 1910. The number of cases found, or treated, during the year 1933, is the smallest on record. There is now no difficulty in obtaining the consent of the parent to allow this treatment to be given to the child. Almost immediately any child is suspected to have Ringworm of the Head it is brought to the School Clinic, where specimens of hair are taken and examined under the microscope, and if it is found to be positive Ringworm, treatment is arranged for. Children are also referred by Private Practitioners to the School Clinic for this treatment.

From Table IV, Group 1, it will be noticed that 52 Elementary, Special, Nursery and Secondary School children were treated for Ringworm of the Head, and of these 40 received X-Ray treatment. Most of the remaining 12 were cases which had been diagnosed, at Branch Clinics, as Ringworm, but after a microscopical examination of specimens of the hair at the Central Clinic, were found to be negative. The average length of time from commencement of treatment until re-admission to Schools of the 40 cases treated with X-Rays was 21·9 days, compared with 21·8 days in 1932, and 20·83 days in 1931.

All the children were re-inspected about six months after treatment, and full re-growth of the hair had occurred in all cases.

PROVISION OF SPECTACLES.

It will be noticed from Table IV, Group 2, that most of the spectacles were provided by this Authority.

A contract is made by the Education Committee with a local Optician for the supply of spectacles at a reduced rate.

It will also be seen from Table IV, Group 2, that during the year 1997 Elementary and 400 Secondary School children were supplied with spectacles by this Authority, against 2004 Elementary and 431 Secondary in 1932.

Of the 2397 supplied, in 1827 cases parents paid the full cost to the Authority. 79 pairs were for children at the Myope School, where Spectacles are provided, free of charge, as part of the treatment, and in 316 cases the cost of the spectacles was remitted by the Committee after a full enquiry into the family circumstances had been made, while in 10 cases the Committee remitted part of the cost. In 165 cases the accounts were carried forward to the year 1934.

In addition to these 213 pairs of spectacles were repaired, or in some cases second pairs of spectacles were provided for the Myope School children, and 1419 repairs or second pairs for children attending ordinary Elementary and Secondary Schools: of these 1301 were paid for by the parents, in 99 cases the cost was remitted by the Committee, and

19 cases were carried forward. These make a total of 4029 pairs of spectacles supplied during the year, against 4294 supplied in the year 1932.

ULTRA VIOLET RAYS TREATMENT.

Ultra Violet Rays treatment is given at the Central School Clinic. During the year 1933, 576 children received this treatment ; 338 cases were completed, 76 cases were treated but for various reasons failed to complete the course, and 162 cases were carried forward to 1934. Of the 338 cases completed, 117 received other forms of treatment, and 221 cases received sunlight treatment only.

A short dose is given at the first attendance, and this is increased gradually to a maximum of five minutes.

The following tables give particulars of treatment and the results.

CASES TREATED BY ARTIFICIAL SUNLIGHT ALONE.

186

Defect	Number of Children	Average number of weeks	Minimum number of weeks	Maximum number of weeks	Average number of doses	Number of exposures					Signs of improvement noted by the Medical Officer					Result of treatment			
						Minutes					Temperature	Energy	Sleep	Nutrition	Haemo- globin	Condition Cleared	Much Improved	Slight	No change
						1	2	3	4	5									
Anæmia	102	11-02	3-5	14-5	22-04	103	144	166	191	1675	45	82	68	73	97	—	96	5	1
Anæmia and Malnutrition	35	11-1	5-5	14-0	22-2	37	48	55	58	583	13	20	12	35	34	—	23	12	—
Anæmia and Debility ...	3	10-8	9-0	12-0	21-6	3	3	4	6	49	2	3	2	2	3	—	3	—	—
Anæmia and Anorexia...	3	12-5	11-0	13-5	25-0	3	4	5	4	59	1	3	3	3	3	—	3	—	—
Anæmia and Heart Condition	1	11-0	—	—	22-0	1	2	2	2	15	—	1	—	—	1	—	1	—	—
Anæmia and Chorea ...	1	12-0	—	—	24-0	1	1	2	2	18	—	1	—	—	1	—	1	—	—
Anæmia and Rheumatism	1	10-0	—	—	20-0	1	1	2	3	13	1	1	1	1	1	—	1	—	—
Anæmia and Bronchial Catarrh	1	13-5	—	—	27-0	1	2	2	3	19	1	1	1	1	1	—	1	—	—
Anæmia and Psoriasis...	1	12-5	—	—	25-0	1	1	1	1	21	—	1	—	—	1	—	1	—	—
Anæmia and Alopecia...	1	12-0	—	—	24-0	1	1	1	1	20	—	1	—	1	1	—	—	1	—
Anæmia and Enlarged Cervical Glands (non-T.B.)...	2	11-0	10-5	11-5	22-0	2	3	5	5	29	—	1	1	2	2	—	2	—	—
Anæmia and Rickets ...	1	9-0	—	—	18-0	1	2	2	2	11	—	1	—	1	1	—	1	—	—
Anæmia and Otorrhœa	1	12-0	—	—	24-0	1	2	2	1	18	1	1	—	1	1	—	—	1	—
Anæmia and Acne ...	1	12-0	—	—	24-0	1	2	2	2	17	—	1	1	—	—	—	—	1	—
Anæmia and Bronchitis	1	11-0	—	—	22-0	1	1	1	1	18	—	1	—	—	1	—	1	—	—
Malnutrition	3	11-0	10-0	12-5	22-0	3	4	6	5	48	—	1	1	3	3	—	3	—	—
Malnutrition and Bronchitis	1	12-0	—	—	24-0	1	1	1	2	19	—	2	—	1	1	—	1	—	—
Other Cond. Nervous System	2	8-75	8-0	9-5	17-5	2	3	3	3	24	1	2	2	2	2	—	2	—	—
Bronchial Catarrh ...	2	12-0	11-0	13-0	24-0	2	4	4	4	34	1	2	2	2	2	—	2	—	—
Furunculosis	1	11-5	—	—	23-0	1	1	1	1	19	—	1	1	1	1	1	—	—	—
Acne	1	10-5	—	—	21-0	1	1	1	1	17	—	1	—	—	1	—	—	1	—
Anorexia	5	10-8	7-0	12-5	21-6	5	6	7	7	83	3	4	4	4	4	—	5	—	—
Alopecia and Rickets ...	1	11-5	—	—	23-0	1	1	1	1	19	—	1	—	1	1	—	1	—	—
Bronchial Catarrh and Rickets	1	8-0	—	—	16-0	1	2	3	2	8	—	1	—	—	1	—	1	—	—
Rheumatism	6	11-2	10-0	12-5	22-4	6	9	9	8	102	4	6	4	6	6	—	6	—	—
Chorea	2	12-25	11-5	13-5	24-5	2	3	3	3	38	—	2	2	2	2	—	2	—	—
Debility	20	10-75	6-5	14-0	21-5	21	27	31	34	318	7	16	10	15	20	—	20	—	—
Sinus (discharging)	1	9-5	—	—	19-0	1	2	3	3	10	—	3	—	—	1	1	—	—	—
Alopecia	4	11-4	10-5	13-0	22-8	4	5	5	6	71	3	2	4	3	4	—	4	—	—
Psoriasis	3	11-6	10-0	13-5	23-2	3	3	3	4	57	1	3	2	2	2	2	2	—	—
Rickets	4	10-5	8-5	12-5	21-0	4	7	8	7	57	2	3	2	4	4	—	3	—	—
Bronchitis	4	12-25	7-5	16-0	24-5	4	7	7	7	73	1	4	3	4	4	—	4	—	—
Asthma	4	12-1	7-5	15-5	24-2	4	4	8	8	75	1	4	3	4	4	—	4	—	—
Asthma and Eczema ...	1	13-0	—	—	26-0	1	1	1	1	22	1	1	1	1	1	—	—	—	1

CASES TREATED BY ARTIFICIAL SUNLIGHT AND OTHER TREATMENT DURING THE SAME PERIOD.

Defect	Number of Children	Average number of weeks	Minimum number of weeks	Maximum number of weeks	Average number of doses	Number of exposures					Signs of improvement noted by Medical Officer					Result of treatment			
						Minutes					Tempera-ment	Energy	Sleep	Nutrition	Haemo- globin	Condition cleared	Condition improved		
						1	2	3	4	5							Much	Slight	No change
Anæmia ...	45	11.4	6.5	14.5	22.8	45	56	69	72	777	21	32	22	34	44	—	42	3	—
Anæmia and Malnutrition	22	11.6	8.5	13.0	23.2	22	29	31	36	392	13	15	13	22	21	—	18	4	—
Anæmia and Enlarged Glands (Non T.B.) ...	3	11.5	11.0	12.0	23.0	3	4	4	6	51	2	2	2	2	3	—	3	—	—
Anæmia and Anorexia ...	1	15.0	—	—	30.0	1	3	2	3	21	1	1	1	1	1	—	1	—	—
Anæmia and Bronchial Catarrh	1	13.5	—	—	27.0	1	1	1	1	23	—	1	1	1	1	—	1	—	—
Anæmia and Debility ...	1	12.0	—	—	24.0	1	1	1	1	20	—	1	1	1	1	—	1	—	—
Anæmia Paresis ...	1	12.5	—	—	25.0	1	1	1	1	21	1	1	1	—	2	—	2	—	—
Anæmia and Otorrhoe	2	8.25	6.0	10.5	16.5	2	3	3	3	22	1	1	1	—	1	—	1	—	—
Anæmia and Rickets ...	1	10.0	—	—	20.0	1	1	2	2	14	—	1	1	1	1	—	1	—	—
Anæmia and Choreia ...	1	9.5	—	—	19.0	1	1	3	3	11	—	1	1	1	1	—	1	—	—
Anæmia and Alopecia ...	1	13.5	—	—	27.0	1	2	2	3	19	—	—	1	1	1	—	1	—	—
Malnutrition ...	12	12.25	9.0	13.0	24.5	12	18	20	22	221	6	9	6	12	12	—	10	2	—
Malnutrition and Rickets	1	14.0	—	—	28.0	1	2	2	2	21	—	—	—	1	1	—	1	—	—
Eczema ...	1	12.0	—	—	24.0	1	1	2	2	18	—	—	—	1	1	—	1	—	—
Enlarged Glands (Non T.B.)	1	11.0	—	—	22.0	1	1	2	2	16	1	—	—	1	1	—	1	—	—
Scoliosis ...	1	10.5	—	—	21.0	1	1	1	1	17	1	1	1	1	1	—	1	—	—
Other Forms of Deformity	2	11.25	9.5	13.0	22.5	2	2	2	2	37	1	2	1	1	2	—	2	—	—
Rheumatism ...	1	9.5	—	—	19.0	1	2	3	2	11	1	1	1	—	1	—	1	—	—
Enuresis ...	1	11.0	—	—	22.0	1	1	3	3	13	1	—	—	1	1	—	1	—	—
Asthma ...	1	11.0	—	—	22.0	1	1	1	1	18	—	1	—	1	1	—	1	—	—
Alopecia ...	1	10.5	—	—	21.0	1	1	1	1	17	—	—	—	1	1	—	1	—	—
Debility ...	10	12.3	10.5	14.0	24.6	10	13	15	15	195	2	6	3	7	10	—	10	—	—
Bronchitis ...	2	12.0	11.5	12.5	24.0	2	3	3	3	37	2	2	2	1	2	—	2	—	—
Bronchial Catarrh	4	11.1	9.0	12.5	22.2	4	7	7	8	63	4	4	1	3	4	—	4	—	—

CASES WHO RECEIVED ARTIFICIAL SUNLIGHT TREATMENT BUT FAILED TO COMPLETE COURSE.

Defect	Number of children	Minimum number of weeks	Maximum number of weeks	Average number of weeks	Duration of exposures					Reason for discontinuance of treatment							
					Minutes					Admitted Hospital.	Financial inability	Left district	Admitted O.A.S.	No one to bring patient	Attending Own Doctor	Decline further treatment	Left school
					1	2	3	4	5								
Anæmia ...	33	2.5	12.0	4.8	33	41	44	43	171	1	5	3	2	6	1	12	3
Anæmia and Malnutrition	11	4.0	8.0	5.5	11	14	11	11	81	—	1	—	7	1	—	2	—
Anæmia and Heart Conditions...	1	—	—	5.0	1	1	1	1	6	—	—	—	—	—	1	—	—
Anæmia and Anorexia ...	1	—	—	4.0	1	1	1	1	4	—	—	—	—	1	—	—	—
Anæmia and Choreæ ...	1	—	—	6.0	1	1	1	2	7	—	—	—	—	—	—	1	—
Anæmia and Otorrhoea...	1	—	—	6.5	1	1	1	1	9	—	—	—	—	1	—	—	—
Debility ...	10	3.0	8.0	5.25	10	12	14	13	56	—	4	—	1	1	—	4	—
Bronchitis ...	1	—	—	2.5	1	1	1	1	1	—	—	—	—	—	—	1	—
Bronchial Catarrh	1	—	—	3.0	1	1	1	1	2	—	—	—	—	—	—	1	—
Anorexia ...	2	5.0	7.0	6.0	2	3	4	4	11	—	1	—	—	—	—	1	—
Rheumatism ...	1	—	—	3.0	—	1	1	1	3	—	—	—	—	—	—	1	—
Alopecia ...	1	—	—	5.5	1	2	1	1	6	—	—	—	—	—	—	1	—
Rickets ...	2	4.0	5.5	4.75	2	2	2	2	11	—	—	—	—	2	—	—	—
Acne ...	3	2.5	6.5	4.8	3	3	3	3	16	—	—	—	—	—	—	3	—
Psoriasis ...	1	—	—	4.0	1	1	1	2	3	—	—	—	—	1	—	—	—
Malnutrition ...	6	3.5	7.0	4.75	6	8	7	7	29	—	2	—	1	2	—	1	—

DENTAL REPORT.

By H. V. MORRELL, L.D.S., R.F.P.S. (Glasgow).

Comparing the total number of children examined in the Routine Age Groups with the corresponding figure of the previous year, it is found that there is an increase of 3,230 in the year under review.

Out of the total number of children examined, at Routine Inspections, 73·7 per cent. were found to require treatment. This does not indicate that the remaining 26·3 per cent. had perfectly sound teeth, free from all decay. In many cases slight defects were discovered in the temporary dentition, but these were of such a minor character that they did not call for treatment.

As the years pass parents are taking a much more intelligent interest in the welfare of their children, and dental hygiene is more widely appreciated. This has led to an increased number of children attending the Clinic for treatment and the Dental Surgeons have found it impossible to inspect the whole of the Schools in their area.

Every day there is a number of "Casual" cases visiting the Clinic, and the time spent in treating them seriously hampers the routine work of the Dentists in the Schools, but the opportunity is taken of making the child's mouth healthy. Many of these cases are treated with Nitrous Oxide Anæsthesia, and not only is the offending tooth removed, but any other decayed teeth which are prejudicing the health of the child. During the year 10,066 children were treated and 1,016 were treated a second time, making a total of 11,082 treatments at the School Clinic. The number of teeth extracted was 17,132, of these 12,536 were temporary, the remaining 4,596 being permanent; included in the permanent number, 976 were extracted for regulation purposes.

Anæsthetics are always given for the extraction of teeth, and general anæsthesia (Nitrous Oxide) was administered in 2,816 cases, in the remaining cases local anæsthesia was used.

The total number of pupils from the Secondary Schools attending the Clinic was 862, and all accepted treatment. No Routine Inspection was held by the Dentists in these Schools and examinations of the mouth are given to these children at the Clinic.

Any child referred by the School Medical Officer who desires treatment is given an appointment.

The Dental Surgeons make a practice of giving talks and short addresses about the teeth in the Schools at the time of inspection, when circumstances permit, and again when the parents visit the Clinics with their children the opportunity is used to give further information on the teeth.

Propaganda of a more general character has been carried out this year with the assistance of the Dental Board and the consent of the Committee. Demonstrations in Schools, which were made most interesting by a capable lecturer, were greatly appreciated by Teachers and Senior Scholars and will prove of educational value.

In conclusion it is gratifying to note that a steady progress is being made with the work, and it is to be hoped that the children who are now being treated will remember the benefits they have obtained from it, and so pass on their knowledge to a future generation.

SPECIAL OPHTHALMIC CASES.

By W. OLIVER LODGE, M.D., F.R.C.S.

Cases are referred by the School Medical Officers to the Ophthalmic Surgeon at the Ophthalmic Clinic, Edmund Street, each Thursday at 2 p.m. Cases requiring operations or hospital treatment are dealt with at St. Luke's Hospital. The consulting Surgeon also visits, as required, the Myope School.

	<i>Child- ren</i>	<i>Attend- ances</i>
1. Total cases from all sources seen at Special Ophthalmic Clinic	254	349
2. Total cases referred from School Clinics seen at Special Ophthalmic Clinic	143	178
(a) Defective Vision and Squint	130	162
(b) External Eye Diseases	13	16
3. Total cases referred from the Myope School seen at Special Ophthalmic Clinic	2	2
(a) Defective Vision and Squint	2	2
(b) External Eye Diseases	—	—
4. Total cases under 5 years (from Nursery Schools, etc.) seen at Special Ophthalmic Clinic ...	109	169
(a) Defective Vision and Squint	90	143
(b) External Eye Diseases	19	26
5. In-patients (St. Luke's Hospital) admitted from Special Ophthalmic Clinic	54	
Operations for:—		
(a) Strabismus	24	
(d) Other disease	19	

ORTHOPÆDIC CASES.

By MR. F. W. GOYDER, M.B., F.R.C.S., Consulting Orthopædic Surgeon.

Lister Lane School.—The Orthopædic Surgeon has attended at this School during 1933 on 38 occasions, making 396 inspections; 60 more than in 1932. Of these, 28 were new admissions to the School as against 14 last year. Many of these cases were discovered by the Orthopædic Surgeon at the Out-Patient Clinic at St. Luke's Hospital, the majority being admitted to the Nursery End. This means that we have now made good progress in the remedial treatment of deformity in its early stages, the only rational method of attack.

18 cases have been admitted to St. Luke's Hospital under the care of the Orthopædic Surgeon. Six of these had no operations, but were admitted for manipulative correction of deformities; no case of Rickets was operated on; 3 had operations for Infantile, 2 for Spastic Paralysis; 3 were treated for deformities arising before and during birth; and the remainder were miscellaneous conditions. Preliminary and post-operative remedial treatment is carried out at the School.

ST. LUKE'S HOSPITAL—OUT-PATIENTS.

These cases consist of children referred from the School Clinics, the Child Clinic, Private Doctors, the Staff at St. Luke's Hospital and other sources. The number seen, 297, is exactly the same as last year.

ST. LUKE'S HOSPITAL—IN-PATIENTS.

121 operations have been performed by the Orthopædic Surgeon; 18 more than last year; of these, 68 as against 84 in 1932 have had general anæsthetics, and 53 as against 19 in 1932 have had purely manipulative procedures. The increase is due to the larger number of cases of Congenital Club-Foot requiring manipulative and plastic treatment.

8.—INFECTIOUS DISEASES.—The exclusion of children suffering from, or in contact with, persons suffering from Infectious Disease for prescribed periods has been carefully carried out, and frequent additional visits to Schools have been made by the Medical Staff on this account.

Notifiable Infectious Diseases are all notified to the Medical Officer of Health by Assistant School Medical Officers and Private Practitioners. All cases notified to the Medical Officer of Health are visited by the Health Visitors, or Sanitary Inspectors, who give advice to parents and guardians of children, respecting the care of the patient and the welfare of those in contact with the disease, and take steps, in cases necessary, for the removal of the children to Hospital. The Health Visitor also issues a notice excluding the patient and those in contact from attendance at School. During the year, 3,655 exclusion notices were issued by the Health Visitors, an increase of 585 over 1932.

In cases visited by the Sanitary Inspectors on account of Scarlet Fever, Small-Pox, or other fevers, exclusion notices are also issued by the Medical Officer of Health for children suffering, or children who may have been in contact with those suffering from the disease. 3,948 notices were issued by the Medical Officer of Health, an increase of 858 over 1932.

During the year 61 Schools were granted certificates of exemption in accordance with the Board of Education's Code of Regulations for periods aggregating to 170 weeks, compared with 31 Infants' Schools and 118 weeks during the year 1932.

It was found necessary to close 2 Schools on account of Infectious Disease.

The diseases for which certificates of exemption were granted and the number of Schools infected, often with more than one disease, are as follows:—

Disease	No. of Schools Infected.			
	1933	1932	1931	1930
Measles	18	23	22	19
Chicken-Pox	11	17	19	10
Mumps	6	18	5	1
Whooping Cough	17	15	10	18
Influenza	56	8	18	2
Scarlet Fever	13	16	12	3
Diphtheria	3	8	2	3

9.—OPEN-AIR EDUCATION.

(a) *Playground Classes*.—The only classes which are regularly held in playgrounds are those for physical training, but in favourable weather other classes are frequently held in the playgrounds.

(b) *School Journeys*.—During the Spring and Summer months children are taken for journeys to the outskirts of the city and given instruction in nature study, botany, etc. Classes are also taken into the Parks and Recreation Grounds for one lesson per week, excepting when the weather is unfavourable.

(c) *School Camps*.—No Schools were kept open during the summer holidays under Camp School arrangements.

(d) *Open-air Classrooms in Public Elementary Schools*.—Open-air Classrooms are in use in all the Special Schools, excepting the Deaf School, also in the Nursery Schools, 5 Infants' Schools and 1 Primary and Infants' School.

10.—PHYSICAL TRAINING.—The work in Physical Training continues to improve in every type of School. The use during the past five years of portable gymnastic apparatus directed by selected Teachers specialising in the subject and the keen interest of the Head Teachers regarding the proper planning of the time-table are responsible for this advance so far as Modern Schools are concerned.

School Physical Training is now providing for more than the immediate needs of the scholars. It is regarded as a health practice the important aims of which are:—(1) to develop in boys and girls the habit of taking healthy exercise; and (2) by means of an all-round training during the years 4 to 14, to give all children an opportunity of acquiring the technique of our national games and pastimes.

Each of the 25 Modern Schools is provided with 8 benches, 4 mats, 1 box horse, 1 horse with pommels and 1 set of jumping stands. In these Schools all the scholars adopt a satisfactory costume which gives ample freedom of movement and all wear suitable shoes. This careful attention to dress is seen also in many of the Non-provided Schools and Junior Departments. It is in these Schools, perhaps, that the most marked improvement has been noticed during the past year. The syllabus of Physical Training, 1933, has been adopted in all Schools.

A special course based on the new syllabus was held during school hours from December 4th to 15th and was attended by 42 women and 30 men; 32 women and 26 men have been enrolled for a similar course to be held from January 9th to 18th, 1934.

100 Head Teachers from Primary and Modern Schools attended a full afternoon lecture-demonstration on the work of the revised syllabus. In April, 1,000 attendances were made by Head and Assistant Teachers at 3 special lecture-demonstrations based on training methods in ball play for Infants, Juniors and Seniors. The usual classes for Teachers have continued throughout the year, i.e., for women, in connection with the Women Teachers' Games Club, and the weekly class for men (for the sixth successive year).

The Playing Fields are now maintained by the Head Groundsman, 2 Assistant Groundsmen, 1 Labourer, and 3 Ground Custodians. Special work is done by labour obtained from the Local Public Assistance Committee.

The Women Teachers' Games Club continues its useful activities through the Gymnastics, Netball, Swimming, Badminton and Rambling Sections.

For the tenth successive year a display of school work was given at the Annual Athletic Festival of the Bradford Schools' Athletic Association. 1,250 children from the Modern and Primary Schools were engaged in showing Class Gymnastics, Games, Skipping and Maypole Dancing.

The Bradford Schools' Athletic Association extended its valuable work by promoting a special Sports Meeting for its newly-formed Athletic Section. Since its formation in 1898 the Association has successfully promoted out-of-school activities connected with the sports field. Its sections now include Athletics, Cricket, Football (Senior and Junior), Netball and Team Tower Ball, Rounders and Swimming.

Swimming and School Baths.—Since the re-organisation of the swimming arrangements in 1928 when the control of the School Baths was transferred to the Education Committee and special Instructors employed, the number of attendances has increased from 106,878 to 220,347 for the year ended 31st March, 1933. Certificates awarded by the Education Committee for proficiency in swimming have grown from 1,223 in 1928 to 2,606 in 1933.

A second year's experience in the use of the graded lessons in the Breast and Back Strokes confirmed the impression of their usefulness. Similar schemes have been prepared in the Breast Crawl and Back Crawl Strokes.

At the 3 School Baths and at certain others, classes attend from 4.30 to 5.30 daily and from 9 to 12 o'clock on Saturdays, all the periods allocated being eagerly accepted. Swimming continues to be taught throughout the year. The number of merit and free passes awarded to school children by the Baths' Committee has grown from 147 in 1928 to 496 in 1933.

11.—PROVISION OF MEALS.—Children are selected for school meals because of their poor physical condition, or because the family income is so small as to preclude parents from providing sufficient food. Cases have been reported to the Committee of children found during Medical Routine and Special Inspections to be suffering from malnutrition, Anæmia, etc. Cases are also recommended for school meals by Teachers, School Attendance Officers and Voluntary Associations interested in Child Welfare.

The Committee have a Central Cooking Depot where meals are provided for children in attendance at Elementary, Special and Nursery Schools. The kitchen is well suited for its purpose, is near the centre of the city and has been well equipped for providing over 5,000 dinners per day. Special care has been taken in regard to hygienic conditions. The meals are conveyed in motor vans to 45 centres for Elementary School children, 6 Special and 8 Nursery Schools.

It is inevitable that the volume of work undertaken at the Cooking Depot and the necessary conveyance of dinners over considerable distances should limit the form and nature of the meal, but as the result of experience and planning it is found possible to provide wholesome and palatable food in adequate variety.

In the preparation of dietaries and in all matters appertaining to the provision of meals the School Medical Staff co-operate with the Administrative Staff.

Two lists of dinners are prepared, one for summer and one for winter. Each list contains 20 different meals and at the end of each four weeks the menu is repeated.

Nursery School children are supplied with special dinners in accordance with alternating weekly menus.

The following, taken for the week ended 18th December, 1933, gives the number of children provided daily with dinners from the Cooking Depots in the various categories:—

Elementary Schools "Necessitous" Cases	Special Schools	Nursery Schools	No. of Meals provided on payment of Full Cost	Total
2551	895	484	629	4559

The total number of meals provided by the Authority during the financial year ended 31st March, 1933, is shown in the following return:—

NUMBER OF MEALS PROVIDED.

	<i>Dinners.</i>	<i>Breakfasts.</i>
(a) From Cooking Depot.		
(1) For necessitous children	757,803	49,351
(2) Meals supplied on payment of Full Cost	60,684	—
(3) For children attending Special and Nursery Schools	257,924	—
(4) For children attending High Schools	26,774	—
(b) By Caterers.		
For necessitous children... ..	4,397	8,699
	<u>1,107,582</u>	<u>58,050</u>
AVERAGE COST PER MEAL	3·61d.	2·67d.

12. CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.—Parents are invited to attend the Routine Medical Inspection of their children in both Elementary and Secondary Schools, and all medical examinations at the School Clinics.

The percentage of parents present at the Routine Medical Inspections will be found in Table VIII at the end of report.

The School Medical Officer is much indebted to the Teachers for the help given at the Routine Inspections, for cases referred to the School Clinics, reporting outbreaks of infectious disease amongst the scholars and sending reports on special cases to the School Medical Officer. In return, the School Medical Department does everything possible to arrange the School Medical Inspections at such times and periods as will least interfere with the educational work of the Schools.

The influence of the Head Teachers with the parents helps the attendance of children at the School Clinics for both medical and dental purposes and the teachers' special knowledge of the children and their environment is very helpful to the Nurses in "following up."

There is as much co-operation as is possible between the School Attendance Department and the School Medical Department in all cases of children requiring medical attention, securing the attendance of children at the School Clinics, assistance in following-up cases, changes in addresses and schools of children, etc.

The School Attendance Officers also assist in the collection of accounts outstanding for medical treatment and dental treatment and in cases where the parents have failed to pay for spectacles supplied to children at the School Clinics.

The help given by the Bradford Cinderella Club in providing children referred to them by the Medical Staff with the necessary clothing and boots, also by sending children to the Ambler Home, Morecambe, has been much appreciated.

The Guild of Help visitors have also assisted the School Medical Service by referring cases to the School Clinics, and by giving them information obtained during their visits to homes.

The Charity Organisation Society has also assisted the School Medical Service in helping cases referred to them by the School Medical Officers, and also by sending children to Holiday Homes and Convalescent Homes.

During the year many cases of neglected children have been brought to the notice of the National Society for the Prevention of Cruelty to Children's Inspectors, with beneficial results to the children concerned. The Inspectors have also visited cases where the parents had refused to obtain necessary medical attention prescribed by the School Medical Officers.

13. BLIND, DEAF, DEFECTIVE and EPILEPTIC CHILDREN.

(a) The methods adopted for ascertaining and dealing with children who are defective within the meaning of Part V of the Education Act, 1921, are as follows :—

The majority of cases are found during the Routine Inspections in the Schools and the Special Inspections at the School Clinics. Others are referred by Head Teachers and School Attendance Officers. Whenever a case is found, or referred, a special appointment is made for the child to be medically examined at the Central School Clinic by the Chief Assistant School Medical Officer, who makes all recommendations to the Local Education Authority for admission to the various Special Schools in the City.

(b) All Mentally Defective children of School age, whether in attendance at Special Schools or not, are placed under the supervision of a Voluntary Care Committee, whose visitation continues until the children concerned leave the Special School on reaching the legal leaving age of 16 years, or, as occurs in some few cases, until they are certified by the School Medical Officer to be incapable of receiving further benefit there. In both instances the children are notified to the Local Mental Welfare Committee under Section 2 (2a) or (2b) of the Mental Deficiency Act, 1913. This Committee also has a Voluntary Committee which undertakes the visitation of such persons at regular intervals, and the reports of these Visitors are presented to the Committee not less than twice each year.

These children also attend the School Clinic, at periods named by the Certifying Officer, for re-examination, or are visited at their homes or Elementary Schools by the Medical Officer.

In the case of Physical Defectives, these are similarly visited during the course of their School life, and if any of the children are reported by the School Medical Officer to be fit to attend an ordinary Elementary School, these are visited for two years whilst at attendance at such School.

On the other hand, children who leave between the ages of 14 and 16 years are visited for 10 years afterwards. The records in this connection are tabulated periodically.

All blind children reaching 16 years of age are notified to the Blind Persons' Act Committee, and are then referred to the Royal Institution for the Blind for Training Courses. When these children leave the Special Schools they are visited and kept under the supervision of the Special Schools' Sub-Committee.

(c) General Review of the Special Schools:—

(1) THE MYOPE SCHOOL.

The School at Daisy Hill is self-contained, exceedingly well-lighted and is of the open-air type. It was specially built for short-sighted children in a six-acre field, sloping towards the south. The field is encircled by a plantation of trees. The accommodation is 178. The functions of the Myope School are open-air life, avoidance of excessive eye effort and frequent re-examination.

Full particulars respecting the buildings, entrance of the children into the School, methods of teaching, meals, frequent examination by the Medical Officer, discharge and further re-examinations after leaving Schools have been given in previous reports. Children remain in the School on an average just under 3 years.

Particulars as to the number of children in attendance at the School during the year are as follows:—

			<i>Boys</i>	<i>Girls</i>
Number on register 1st January, 1933	...	...	60	103
Number admitted during 1933	...	...	3	9
Number discharged during 1933	...	...	12	27
Number on register 31st December, 1933	...	...	51	85

Children who have left during 1933:—

			<i>Boys.</i>	<i>Girls.</i>
1. Transferred to Blind Schools	...	...	1	—
2. Deceased	...	...	1	—
3. Certified fit for Ordinary School	...	...	6	15
4. Certified fit for Secondary School	...	...	1	—
5. Went to work at 14 years of age	...	...	3	12
			—	—
Totals	...	...	12	27

It will be seen from the above figures that 12 children were admitted during the year. The average number admitted during the eight years previous was 46.1. The number discharged was 39, and the average number discharged for the eight years previous was 40.

In addition to the 136 children on the register of the school at the end of December, 1933, it will be noticed from Table III at the end of the report that there were 34 children attending Public Elementary Schools and 2 children at no school or institution.

Of the 34 children attending Public Elementary Schools, in 27 cases the parents objected to the children being transferred to the Myope School, and they are being kept under observation in Elementary or Open Air Schools; 7 were in the transition stage of being transferred to the Myope School.

The 2 children classed at no School or Institution were both receiving private tuition.

Particulars of the after-careers of the children who have left this School have been given in previous reports.

(2) THE DEAF SCHOOL.

Particulars respecting the site, surroundings, and buildings were given in the 1930 report. The accommodation for deaf children is 45.

The children stay at the school all day and their meals are sent from the Green Lane Cooking Depot.

The Teaching Staff consists of the Head Teacher and three Assistants, in addition one man attends two half-days per week to teach the boys cobbling.

The acquisition of language is the most important item of the curriculum, and along with it the teaching of speech and lip-reading. Arithmetic is taught from the first, but other school subjects follow as language grows.

The semi-deaf or hard-of-hearing are taught in a class by themselves, as their needs are very different from those of the really deaf.

Fuller particulars respecting this school have been given in previous reports.

Particulars as to the number of children in attendance at the school during the year are as follows:—

			<i>Boys</i>	<i>Girls</i>
Number on register 1st January, 1933	...	...	21	17
Number admitted during 1933	...	...	5	6
Number discharged during 1933	...	...	3	4
Number on register 31st December, 1933	...	...	23	19
			<i>Boys</i>	<i>Girls</i>
1. Bradford children:—				
(a) Totally Deaf	...	...	13	8
(b) Partially Deaf	...	...	3	4
(c) Aphasic	...	...	7	7
2. Children from other towns:—				
(a) Totally deaf	...	...	2	—
Children who have left during the year :—				
1. Transferred to Hearing Schools	...	...	1	—
2. Went to work at 16 years of age	...	...	1	3
3. Went to work at 14 years of age	...	...	1	—
4. Died	...	...	—	1
			—	—
Totals	...	...	3	4
			—	—

(3) LISTER LANE SCHOOL FOR PHYSICALLY DEFECTIVE CHILDREN.

This is a special school for children who are so incapacitated, principally on account of deformity or cardiac disease, that they are unable to benefit from education in an ordinary Elementary School.

In January, 1930, accommodation for Nursery children (2 to 5 years) was provided at this School in order that Crippled children might have early treatment and training. This has already resulted in the transference of many cases to ordinary Schools within a few years. Other children are admitted on attaining School age, or later, and stay until 16 years of age.

Motor ambulances are provided for the conveyance of children unable to travel by the ordinary means of transport. Special chairs and couches are available in the class-rooms.

The School is designed on open-air lines with ample window space and playing grounds. The main block is orientated to get the maximum amount of sun. The children stay all day at school, their dinners being sent from the Green Lane Cooking Centre. Additional milk puddings are prepared in the School Kitchen, where also the girls get cookery lessons. The children rest for an hour on canvas stretchers after their dinners.

The Medical Staff consists of a Nurse and three Masseuses, who are employed whole-time, the Medical Officer, who visits one half-day a week, and a Consulting Orthopædic Surgeon, who visits one half-day a week. Massage, remedial exercises, baths and electricity form part of the routine treatment. Cellulose splints and jackets and simple metal splints are made and fitted at the School, and in a few cases boots and appliances have been provided by the Authority. The Orthopædic Surgeon operates on selected cases at St. Luke's Hospital.

Some of the older girls too, help in the Nursery School with the small children during the dinner hour, but their help can only be given at such times as will not interfere with their education.

The disabilities under which these crippled children labour during school age and in after life are so great that every effort should be made during the former period to make them in the latter period independent and self-supporting members of the community. In mental capacity the children vary from those considerably retarded mentally to the acutely intelligent secondary school children. The physical capacity is almost as wide.

Every effort is made to keep the children up to standard in English and Arithmetic, so that they will not be at a disadvantage on return to the ordinary School but as remedial and medical treatment must come out of school time, this is almost impossible in some cases. The children are helped to overcome their handicaps by treatment and training.

A class for specially handicapped children has been formed to teach Home Handicrafts, Repairs and Home Duties, such as charring, simple cookery and laundry.

The children who stay until 16 years of age are given vocational training—Dressmaking, Tailoring, Millinery for girls; Boot Repairing, Furniture Renovation and Poster Writing for boys. There is a Commercial Class open to both boys and girls.

The following is a daily programme for the Nursery Section:—
(The only fixed times are for Registers, Meals and Sleep).

Hot milk on arrival.

Personal hygiene; lavatory cleanliness, teeth, nose-drill, hair, bath
(if necessary).

Minor ailments treated.

Change shoes—put on overalls.

Wash up mugs used for milk.

Short Morning Service: Hymn and prayer, when all are present, i.e.,
after arrival of second ambulance.

Registers: closed at 10.30 a.m.

Free play with toys of different kinds to meet the changing demands
of growth.

Individual use of special apparatus.

Musical expression and simple rhythmic exercises.

Gardening—observational training.

Stories, poetry, rhymes.

Simple occupations such as crayoning, painting, sand-play, building
or bead-threading, etc.

Preparation of tables for dinner.

12 noon—dinner. Malt and medicines.

Share in serving food and clearing tables.

Personal Hygiene.

Afternoon sleep.

Put on shoes, put away bed and blanket, and go out to play.

Milk with apple, then get ready for going home.

Children on second ambulance have some play occupation, singing,
games or story.

There were 219 children on the School Roll at the end of the year classified as follows :—

Defect	Boys			Girls			Total
	Aged under 5	Aged 5 to 10	Aged 11 to 15	Aged under 5	Aged 5 to 10	Aged 11 to 15	
Congenital Deformities, <i>e.g.</i> , Club-foot, Dislocation of Hipjoint, etc.	2	11	3	—	6	2	24
Birth Palsy, Torticollis, Infantile Hemiplegia, etc.	—	2	1	—	2	4	9
Deformities due to Infantile Paralysis ...	3	16	8	2	7	6	42
Deformities due to Rickets	2	1	—	2	3	—	8
Deformities due to Tuberculous Disease of Bones and Joints :							
1. Spine	—	3	4	—	5	5	17
2. Hip	—	2	5	—	2	5	14
3. Other regions ...	—	2	—	1	2	1	6
Heart Disease :—							
Congenital	—	2	4	—	3	2	11
Acquired	1	19	9	—	21	13	63
Other Conditions	—	5	7	—	6	7	25
Totals	8	63	41	5	57	45	219

	Boys	Girls
Number on Register 1st January, 1933	114	99
Number admitted during 1933	25	34
Number discharged during 1933	27	26
Number on register 31st December, 1933	112	107
Children discharged during the year :—		
1. Fit to attend an Elementary School	10	9
2. Unfit to attend any School	4	1
3. For employment at 16 years of age	3	3
4. For employment under 16 years of age	6	5
5. Left the City	—	3
6. Deceased	3	3
7. Other reasons	1	2
Totals	27	26

A report on the after-careers of the children who left this School during the seven years ended 31st December, 1932, tabulated from the results of visitation by the members of the After-Care Committee, appeared in the Report for 1932.

The following table gives particulars of treatment given by the Masseuses at Lister Lane School :—

Defect	Nature of Treatment							
	Massage.		Electrical.		Remedial Exercises.		Splints and Jackets.	
	Child- ren	No. of Treat- ments	Child- ren	No. of Treat- ments	Child- ren	No. of Treat- ments	Child- ren	No. of Treat- ments
Tubercular Bones and Joints	8	331	—	—	16	1147	13	492
Osteo-Myelitis Left Hip ..	—	—	—	—	—	—	1	40
Rickets	17	759	1	92	7	440	1	42
Spinal Curvature	—	—	—	—	6	778	—	—
Heart Disease	—	—	—	—	1	107	—	—
Paralysis	36	2189	4	243	22	1916	—	—
Congenital Deformities ..	5	433	—	—	1	107	1	21
Miscellaneous	16	732	2	86	13	791	4	91
Totals	82	4444	7	421	66	5286	20	686

(4) THE MARGARET McMILLAN SPECIAL DAY SCHOOL FOR MENTALLY DEFECTIVE CHILDREN.

The history of Mental Defective Schools, particulars respecting the present buildings, and photographs of the new Boys' School which was opened 23rd September, 1929, appeared in the 1929 report.

As far as possible, with mentally defective children, the chief aim is to teach these children those things which will be most useful and helpful after leaving school, when to a certain extent they have to rely on themselves, so that although limited in many ways they may at least try to be decent and happy citizens by taking a pride in themselves and their homes.

The curriculum for both boys and girls at this school was given in the Report for 1931. .

The numbers of children attending this School are shown in the following table :—

	On roll 1st January, 1933	Admitted	Discharged	On roll 31st December, 1933
Boys	60	11	14	57
Girls	53	2	11	44
Totals	113	13	25	101

Boys who have left during the year:—

1. Went to work at 16 years of age	...	...	...	5
2. Placed under guardianship of parents	...	...	...	4
3. Transferred to Bowling Institution	...	...	...	1
4. Transferred to Institution for Mental Defectives	...	...	...	2
5. Left the city	...	...	...	2
				—
Total	...	...	...	14

Girls who have left during the year:—

1. Placed under guardianship of parents	...	...	...	9
2. Transferred to Institution for Mentally Defectives	...	...	...	2
				—
Total	...	...	...	11

(5) THACKLEY OPEN-AIR SCHOOL.

Full particulars of this School, which has been in existence since 1908, have been given in previous Reports.

The children who attend this School are of all ages from 6 to 14, and are those who live on the North, North-East and North-West sides of the City.

Particulars respecting the selection of children for admission, means of transport, medical supervision and discharge were given in the 1932 Report.

On arrival at School the children are provided with breakfast, consisting of:—Porridge with milk and treacle; bread and margarine (or dripping) and cocoa. Dinners are now supplied from the Green Lane Cooking Depot. Tea:—At the end of the afternoon before departure for home, each child has a mug of warmed milk.

This School continues to be conducted along the lines indicated in previous Reports. A record is kept of all clinical facts relating to each child, and the height, weight, lung capacity and hæmoglobin content are also noted. The accommodation is 275. The School is open all the year round, excepting holidays.

The following Table gives the average increases in height, weight, etc., of the children discharged during the fourteen years, 1920-1933.

Year	Number of children discharged	Increase in weight (kilos.)	Increase in height (cents)	Increase in hæmoglobin	Increase in chest measurement (ins.)	Average stay in months
1920	177	2.58	5.29	11.33%	0.94	10.5
1921	258	2.20	3.27	9.34%	0.61	7.3
1922	297	2.28	4.78	12.88%	0.37	8.4
1923	257	2.43	4.06	8.04%	1.11	8.7
1924	329	2.48	3.43	14.15%	0.59	7.3
1925	410	2.64	3.46	12.99%	1.02	7.5
1926	415	3.28	3.46	12.43%	1.50	8.4
1927	381	2.81	4.55	10.82%	1.00	9.2
1928	362	2.80	4.36	12.65%	1.20	8.8
1929	414	2.56	3.93	12.77%	0.85	8.7
1930	418	2.52	3.92	14.05%	0.55	9.1
1931	410	2.25	3.28	11.41%	0.32	7.9
1932	423	2.70	3.00	8.80%	0.33	8.8
1933	413	2.44	2.80	11.08%	0.39	6.6

The numbers of children in attendance at the Thackley Open-air School during the year 1933 were as follows :—

		Boys	Girls
Number on register 1st January, 1933	...	145	162
Number admitted during 1933	...	228	256
Number discharged during 1933	...	219	262
Number on register 31st December, 1933	...	154	156
Average number present during the year	...	253.5	

(6) ODSAL HOUSE OPEN-AIR SCHOOL.

Particulars of this School respecting the situation, aspect, area, buildings, etc., were given in the 1927 Report. The accommodation is for 200 children, including those in residence.

The children who attend this school are of all ages 6 to 14, and are those residing on the South, South East and South West sides of the City.

The dietary is very similar to the one at Thackley. The older boys and girls are taught gardening and domestic work, such as repairing tools, apparatus for all practical arithmetic and geography, elementary upholstery, repairing of desks and chairs, decorative work, etc.

The following Table gives the average increases in height, weight, etc., of the children discharged during the five years, 1928–1933:—

Year	Number of children discharged	Increase in Weight (kilos.)	Increase in Height (cents.)	Increase in Hæmoglobin (per cent.)	Increase in Chest Measurement (inches)	Average stay in months
1928	184	1.95	3.31	18.7	0.25	7.69
1929	398	2.15	3.63	14.2	0.29	7.97
1930	352	1.88	2.97	14.3	0.06	6.92
1931	419	1.84	2.31	17.7	0.09	5.53
1932	443	2.10	2.47	12.5	0.44	6.37
1933	262	1.76	2.61	17.01	0.65	5.83

Particulars as to the number of children in attendance at the Odsal House Open-Air School during the year are as follows:—

	<i>Boys</i>	<i>Girls</i>
Number of children on register 1st January, 1933 ...	134	95
Number admitted during the year	233	195
Number discharged during the year	238	187
Number on register 31st December, 1933	129	103
Average number present during the year	109·4	82·8

RESIDENTIAL OPEN-AIR SCHOOL.

Since November, 1930, accommodation has been provided at the Odsal House Open-Air School for 20 boys and 20 girls to be kept in residence.

The Domestic Staff consists of Matron and 2 Maids. The children selected for residence are delicate children from homes, which are considered to be overcrowded and generally bad, especially the sleeping accommodation. The residential record card of each child includes information as to house, type, condition of living rooms, sleeping rooms, number of occupants and number of occupants of child's sleeping room, special comments, e.g., family history, environment, control, etc.

Children remain in residence for about three months, *i.e.*, one school term, excepting odd cases, who on account of their poor physical condition are kept on for a further period. All the children showed signs of great improvement, the chief signs being in hæmoglobin and gain in height and weight. There was also a noteworthy improvement in the general conduct and behaviour of these children.

During the year 1933, 57 boys and 55 girls were in residence at this School, and the undermentioned Table shows the improvement of their physical condition at the time of discharge:—

Year	Number of children	Increase in Weight (kilos.)	Increase in Height (cents.)	Increase in Hæmoglobin (per cent.)	Increase in chest measurement (ins.)	Average stay in months
1931	155	4·32	0·75	16·25	0·08	2·92
1932	87	1·85	1·81	11·33	0·26	3·81
1933	112	2·10	1·69	15·23	0·60	3·64

These numbers are included in the figures showing those in attendance at the Odsal House Open-Air School.

The menu for the residential children is as follows: Breakfasts and Dinners, Monday to Saturday the same as the day open-air children. Breakfasts, Sunday: bacon sandwiches, bread and butter, cocoa or milk. Dinner, Sunday: thin soup, meat and two vegetables, stewed fruit or fruit pie and custard. Teas: Bread and butter with one of the following: cold boiled bacon, meat roll (hot), meat sandwiches (mixed), shepherd's pie, scrambled eggs, fishcakes, fish pie, bananas and custard, fresh fruit salad and fruit and custard, and tea or milk.

(7) GRASSINGTON SANATORIUM SCHOOL.

Children found at Medical Inspections to be suffering from or suspected to be suffering from Pulmonary Tuberculosis are referred to the Tuberculosis Officer, who holds a Children's Clinic at 2 Howard Street each Thursday at 9.30 a.m.

Children are selected by the Tuberculosis Officer for attendance at the Grassington Sanatorium School, and are conveyed there by ambulance.

Excepting an occasional case that is withdrawn by the parent or other reasons, such as infectious diseases, etc., the children remain at this school until discharged by the Medical Officer of the Sanatorium.

On 1st January, 1933, 18 boys and 19 girls were in residence at this school. 24 boys and 26 girls were admitted, 23 boys and 31 girls discharged, leaving in residence on 31st December, 1933, 19 boys and 14 girls. It will, therefore, be noticed that the numbers in residence at the end of the year varied from those at the end of 1932 as follows :— 1 boy more and 5 girls less.

The 33 children on register 31st December, 1933, were classified by the Medical Superintendent of the Institution, Dr. Cummings, as follows :—

	Boys.	Girls.
1. Active Pulmonary Tuberculosis (including pleura and intrathoracic glands)	10	8
2. Non-Pulmonary Tuberculosis	6	1
3. Pre-Tubercular	3	5
Totals ...	19	14

The 54 children discharged were dealt with as follows :—

Admitted to	Boys	Girls	Total
Thackley Open-air School	5	6	11
Odsal House Open-air School	10	14	24
Ordinary School	6	4	10
Over 14 years of age	—	2	2
Treatment at the Anti-tuberculosis Centre ..	1	1	2
McMillan School	—	1	1
Lister Lane School	—	1	1
Bradford Children's Hospital	—	1	1
Deceased	—	1	1
For re-admission	1	—	1
Totals	23	31	54

Mr. F. W. Goyder, M.B., F.R.C.S., Consulting Orthopædic Surgeon, attends this School monthly to supervise the treatment of Surgical Tuberculosis and arranges for any cases requiring Surgical Treatment to be transferred to the Orthopædic Clinic at St. Luke's Hospital.

ANTI-TUBERCULOSIS CENTRE.

The following particulars respecting the treatment of school children at the Anti-tuberculosis Centre have been supplied by Dr. Vallow, the Tuberculosis Officer :—

Children treated at the Anti-tuberculosis Centre :—

	<i>Boys</i>	<i>Girls</i>
Number under treatment on the 1st January, 1933 ...	5	5
Number of new cases during the year	61	48
Number of cases discharged during the year (including cases sent to Sanatoria)... ..	63	49
Number remaining under treatment on 31st December, 1933 (including cases who were not sent to Grassington until January 1st, 1934)	3	4

14. FULL-TIME COURSES OF HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS.—Owing to the fact that there will be only a very small number of Blind Adolescents (16 to 21 years of age) for training during the next three or four years, it was decided in February, 1932, to send these pupils away from Bradford to Residential Institutions of a suitable character, except when the parents agreed to make suitable arrangements for the general education of the trainee.

Arrangements are made for adult trainees (21 to 50 years of age) to receive courses of instruction at the Royal Institution for the Blind at Frizinghall, Bradford, where the following trades are carried out:—

Basket-making.

Brush-making.

Mat-making.

Boot-repairing.

Hand-knitting.

Machine-knitting.

Students must present certificates approved by the Bradford City Council, who must also be satisfied that the course of training undertaken will be such that there is a reasonable prospect of remunerative employment when training is completed.

The following particulars are of students at present receiving training by this Authority:—

	Trades				
	Brush-making	Machine-knitting	Basket-making	Mattress-making	Total
Adults:—					
At the Royal Institution for the Blind:—					
Males	2	—	1	7	10
Females	—	—	—	2	2
Total	2	—	1	9	12
Adolescents (all girls):					
Henshaw's Inst. ...	—	2	—	2	4
Catholic Blind Asylum, Liverpool					1
Royal Inst. for the Blind, Frizinghall	1	—	—	—	1
Total	1	2	—	2	6

There is one adolescent girl receiving higher education at the Henry Worrall Deaf School for Elder Girls, Manchester.

No arrangements are made by this Authority for full time courses of higher education for Defective and Epileptic Students.

15. NURSERY SCHOOLS.—At the end of the year there were eight Nursery Schools in Bradford, St. Ann's R.C. School was opened in the spring of 1920, Princeville School in November, 1920, Lilycroft School in May, 1921, Wapping Road in October, 1925, Bowling Back Lane School 5th November, 1929, Bierley School 10th November, 1930, St. Joseph's R.C. School 3rd November, 1931 and St. Edmund's School 23rd October, 1933.

Full particulars respecting sites, buildings, equipment, gardens, dietary provided and general principles which guide the life of the Nursery School, etc., etc., have been given in previous reports.

The Medical Staff acts in close association with the Education Staff in connection with the general arrangements, equipment and dietary provided. The Assistant School Medical Officer visits the schools one half-day per month and the Nurse one half-day per week.

At the monthly visit to the School the Assistant School Medical Officer makes a general practice of thoroughly inspecting all children admitted since the previous visit, and excepting a few special cases, the children examined can be classed as Entrants to Nursery Schools. The analysis of these inspections will be found in Table II, under the heading of Nursery Schools.

The following table gives the number of defects found at the periodical examinations (other than the entrance inspection) of Nursery School Children:—

Defect or Disease.	Number of Defects.			
	To be kept under observation but not referred for treatment.	Referred for Treatment.	Treated by this Authority.	Treated Otherwise.
Malnutrition... ..	1	11	10	1
Uncleanliness : Head	—	18	17	—
Body	—	2	—	—
Skin : Scabies	—	2	1	—
Impetigo	—	25	24	—
Other Diseases (Non-T.B.)... ..	1	27	27	—
Eye : Blepharitis	—	13	13	—
Conjunctivitis	—	1	1	—
Squint	10	11	10	—
Other Conditions	1	3	3	—
Ear : Defective Hearing	1	1	—	—
Otitis Media	1	11	11	—
Other Ear Disease	—	6	6	—
Nose and Throat :				
Enlarged Tonsils	20	96	93	3
Adenoids	—	2	2	—
Enlarged Tonsils and Adenoids	—	11	10	—
Other Conditions	1	33	30	2
Enlarged Cervical Glands (Non-T.B.)	—	15	14	—
Defective Speech	1	—	—	—
Dental Disease	—	12	2	—
Heart and Circulation:				
Heart Disease—Organic	6	—	—	—
Functional	5	3	3	—
Anæmia... ..	4	32	31	1
Lungs : Bronchitis	4	32	28	1
Other Non-T.B.. Diseases	3	24	22	1
Nervous System : Epilepsy	1	—	—	—
Chorea	—	1	1	—
Other Conditions	—	3	2	—
Deformities : Rickets	1	5	4	—
Other Forms	1	7	6	1
Infectious Diseases... ..	—	18	17	—
Other Defects and Diseases	7	50	42	5
Minor Ailments	1	9	9	—
Totals	70	484	439	15

16. SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.—A statement of the work of the School Medical Service in connection with pupils attending Secondary Schools and other Institutions of higher education showing the provisions made for treatment, arrangements for the following-up of defects found, forms of treatment provided under arrangements made by the Authority and types of pupil for whom treatment is available were given in the 1932 Report.

During the year the Woman Medical Officer has been employed about five half-days per week on work in connection with the Secondary Girls' Schools. In the Boys' Secondary Schools a similar amount of time has been spent, the Medical Officer in each of the four districts taking the Secondary Boys' School in his particular district. Medical Inspections have been carried out in all the Secondary Schools under this Authority also in the College of Art, Bradford Boys' Grammar School, the Bradford Girls' Grammar School, St. Bede's Grammar School and St. Joseph's College for Girls.

It will be seen from Table I that 4,470 children were examined during the year, excluding entrants, compared with 4,446 in 1932, 4,233 in 1931.

17. PARENTS' PAYMENTS.—The Education Committee ask parents to contribute the undermentioned amounts towards the cost of the medical and dental treatment of their children, except children who attend the Myope School, where spectacles are provided free, as part of the treatment, and at the School for Physically Defective children, where orthopædic and remedial treatment is given free of cost:

PAYMENTS.—To be made at the Clinic.

X-RAY Treatment	...	...	...	7/6 per case.
Operative Treatment for Enlarged Tonsils and Adenoids	...	...	...	7/6 per case.
Dental Treatment	...	...	...	6d. per attendance.
Ultra-Violet Ray Treatment	...	...	...	6d. per attendance.
Massage and Remedial Treatment	...	...	...	6d. per attendance.
Provision of Spectacles	...	...	...	Actual Cost.
Minor Ailments	...	...	...	Contributions to be placed in the Collection Boxes.

Payment of the larger sums mentioned may be made by instalments, if necessary. All cases in which the family income is so small as to preclude parents from paying will be treated free of charge.

Parents are requested to see that a Receipt Ticket is handed to them for each contribution (except when placed in the collection box, which must only be used in connection with Minor Ailments).

Summary of Payments for 1933:—

						£	s.	d.
Supply of Spectacles	...	...	...	...	...	152	9	3
Tonsils and Adenoids	.....						
X-RAY Treatment								
Dental Treatment				...	...	...	748	8 5
Ultra-Violet Ray Treatment								
Remedial Treatment								
Minor Ailments (from collecting boxes)				...	...	27	0	5½
Malt and Oil	...	...	...	...	...	...	149	16 0
Emulsion	...	...	...	...	...	...	54	15 0
Virol	...	...	...	...	...	...	2	9 2

18. HEALTH EDUCATION.—During the winter months occasional Lantern Lectures are given by members of the Medical Staff on the health of the school child, with fairly good results. The Dental Surgeons make a practice of giving talks and short addresses about the "Care of the Teeth" in the Schools at the time of the inspection, when circumstances permit, and again chair-side talks are given to parents when they visit the clinic with their children for treatment.

During the year 1933, propaganda of a more general character has been carried out by the "Dental Board of the United Kingdom Exhibit." Fifteen Modern Schools with an average attendance totalling about 3,700 children, all over 11 years of age, were visited by the Demonstrator with the Exhibit. The procedure adopted was for the Demonstrator to give a talk of about twenty minutes' duration, the children then coming forward to examine the models and have them explained in detail. About 125 children were present at each demonstration.

Leaflets are distributed to parents and children at the School Medical Inspection, Cleanliness Inspections by the Nurses and at the Special Inspections at the School Clinics on the following defects and diseases:—

- (1) The Hygiene of Childhood, which deals with foods, clothing, sleep and fresh air.
- (2) Instructions to children provided with spectacles.
- (3) Instructions for Cleansing of Heads.
- (4) Directions for the Removal of Nits.
- (5) Directions for Eye Treatment.
- (6) Cleansing of the Person: head, body and clothing.
- (7) Measles: early signs, precautions to prevent spread of infection to others and how to avoid complications.
- (8) Influenza: special precautions, care of general health during an epidemic, care of the patient and how to avoid spread of infection to others.
- (9) Infantile Diarrhœa: factors causing diarrhœa in children, prevention and treatment.
- (1) Care of the Teeth.
- (11) "What about your Teeth?" To boys and girls about to leave School (issued by the Dental Board of the United Kingdom.

19. SPECIAL ENQUIRIES.—During the year 1933 further enquiries were made respecting the progression of Myopia. Records have been obtained of 802 cases, and the following Table gives the annual rate of progression:—

Progression in 802 cases of Myopia.

Age Group	Elementary Schools				Secondary Schools				Myope School			Annual average progression		
	Boys	131	Girls	213	Boys	96	Girls	141	Boys	81	Girls		140	
5	—·54	3	—·5	2					—·19	4	—·32	7	—·39	16
6	—·52	5	—·65	10					—·38	12	—·58	10	—·53	37
7	—·4	11	—·43	26					—·33	6	—·37	15	—·38	58
8	—·41	32	—·48	56					—·22	10	—·27	32	—·35	130
9	—·5	33	—·61	57					—·29	27	—·38	14	—·45	131
10	—·34	19	—·43	29	—·36	26	—·31	24	—·33	8	—·44	16	—·37	122
11	—·44	18	—·35	18	—·28	24	—·46	35	—·44	7	—·47	17	—·41	119
12	—·12	7	—·28	9	—·31	22	—·36	23	—·33	7	—·35	19	—·29	87
13	—·29	3	—·39	6	—·38	15	—·35	22			—·22	10	—·33	56
14					—·29	9	—·39	11					—·34	20
15							—·18	26					—·18	26
and over														
All ages	—·39		—·46		—·32		—·39		—·31		—·38		—·37	802

The undermentioned Table shows the annual rate of progression of 26 children with Myopia, who attended Elementary Schools, and afterwards attended Secondary Schools:—

Name.	Age.	Progression rate at Elementary School.	Progression rate at Secondary School.
M.B.	8	—·5	—1·25
I.B.	8	0	—1·25
G.B.	9	—1·5	—·5
A.B.	8	0	—1
K.B.	8	—·5	—·5
A.B.	7	—1	—·75
M.C.	10	—·5	—·5
M.E.	8	—1	—·25
M.E.	9	—1	—·5
M.F.	8	—1·25	—·5
D.G.	9	—·5	—·25
D.G.	9	0	—1
E.H.	9	0	—·25
S.L.	8	—·75	—·25
M.L.	8	—·75	—·5
J.L.	9	—·5	0
W.L.	10	—·25	—·5
J.L.	9	0	—·25
L.M.	10	—·25	—·5
K.M.	9	—·5	—·25
H.N.	10	0	—·5
M.P.	9	0	0
P.R.	7	0	—·25
K.R.	8	—·25	—·5
L.T.	9	—·5	—·5
A.W.	10	0	—·25
		Average —·37	Average —·49

20. MISCELLANEOUS.—(i.) During the Summer of 1933, 1,065 Junior Scholarship candidates were medically examined, a decrease of 41 from the previous year. Of that number 442, or 41·5 per cent., were found to be suffering from some abnormality, full particulars of which will be found in the undermentioned Table.

Of the 442 found abnormal, 279, or 26·2 per cent. of the number examined were referred for treatment.

Defect or Disease	Number of Defects.	
	To be kept under observation, but not referred for treatment.	Referred for treatment.
Malnutrition	3	37
Skin : Other Diseases	—	8
Eye: Blepharitis	—	3
Conjunctivitis	—	1
Defective Vision	107	114
Squint	3	2
Other Conditions... ..	2	2
Ear: Defective Hearing	—	1
Nose and Throat: Enlarged Tonsils	28	63
Adenoids	1	1
Tonsils and Adenoids	—	2
Other Conditions	3	15
Enlarged Cervical Glands (Non-tub.)	6	11
Defective Speech	2	—
Dental Disease	—	14
Heart and Circulation : Heart Disease	4	5
Organic Functional	7	6
Anæmia	—	20
Lungs: Bronchitis	—	3
Other Non-T.B. Diseases	4	8
Nervous System: Chorea	—	4
Other Conditions	3	4
Deformities: Rickets	2	—
Spinal Curvature	1	19
Other Forms	9	10
Other Defects and Diseases	6	22
Minor Ailments... ..	—	1
Totals		
	191	376

In practically all cases where the Medical Officer had recommended treatment, the treatment was carried out at the School Clinic or Special Departments under this Authority.

Two girls were certified unfit to take up scholarships on account of Organic Heart Disease, one girl unfit on account of Myopia and one girl unfit on account of Malnutrition and Lung Disease.

In the cases of 6 boys and 5 girls, it was recommended that the scholarships be postponed as follows:—

4 boys postponed for 12 months on account of chorea, anæmia, malnutrition, etc., 1 boy and 3 girls postponed for 12 months on account of Myopia, and 1 boy and 2 girls postponed for 6 months on account of anæmia.

2 boys and 2 girls were admitted to the Open-Air School on account of tachycardia, anæmia, etc., and one boy to the Myope School for Myopia.

In 12 cases children were certified fit to take up a secondary education on conditions that they were exempted from doing any homework for given periods, after which they were re-examined, the chief cause being on account of myopia. In 3 cases children were to be exempted from any physical exercises or games on account of heart conditions. 3 boys and 1 girl were placed on probation for 6 months.

(ii). EMPLOYMENT OF CHILDREN AND YOUNG PERSONS Education Act, 1921, Part VIII, Section 90 to 108.

(a) There has been no change in the administration of the Bye-laws for the control of young persons trading in the streets, and for the regulation of children in general employment.

The provisions of the Bye-laws controlling these employments have been so widely and thoroughly circulated throughout the City that flagrant offences rarely occur.

Approximately 500 children were known to be employed out of school hours during the year, the chief occupations being those of errand boys or girls in connection with shops of Newsagents, Milk Dealers, Grocers, Butchers, Confectioners, and Greengrocers. The number of offences discovered during this period was 134, these figures relating to 77 children. Warning notices were served in respect of 133 of these complaints, and in the remaining instance the employer was prosecuted and fined 5/-.

A number of employers were found to be employing children before the end of the School Term and the necessary action was taken.

Nineteen children, who were under 12 years of age, were found to be employed contrary to the provisions of the Education Act, and in each case warnings were sent to the employers concerned.

In February, 1933, 42 children who had been employed in Pantomimes were re-examined immediately the Pantomimes were finished, and all were found to be in a physically good condition.

In October, 1933, 33 children were examined *re* licences to take part in Pantomimes; 32 of these were found to be physically fit, and one was considered to be unfit. Of the 32 certified to be fit, 29 applications were made and granted.

Thirty-one children have visited Bradford under licences issued by other Education Authorities and have taken part in public entertainments at the various places of amusement in the city.

Ten children were found to be employed in public entertainments after 7 p.m. without licences. Eight of these were boys taking part in boxing exhibitions. In each case the employer was warned that a repetition of the offence would involve him in legal proceedings.

The Statutory Rules and Orders are strictly enforced. Apartments in respect of children on tour are very carefully inspected; the children are chaperoned to and from the theatre, and attend school regularly. The dressing rooms at the theatres and music halls are regularly inspected, and the children checked as to the time they leave the theatre, etc.

STREET TRADING.

No girl under the age of 16 years is permitted to engage or to take part in street trading, and youths desiring to follow this occupation must be 15 years of age and be certified as fit for this occupation by the School Medical Officer.

No licences were issued during the year and during this period 22 boys and 2 girls were found illegally trading in the streets without licences. The employers and parents of 22 of these children were warned that a repetition of the offence would involve them in legal proceedings, and in the remaining instances the parent and employer were prosecuted and fined 25/-.

Having regard to the size of the City, there is no serious ground for complaint, either with regard to the employers of children or respecting the young persons trading in the streets.

In the work of supervision of Street Traders the Police have readily and effectively co-operated with the officials of the Education Department.

The Children and Young Persons' Act, which came into operation on the 1st November, 1933, has in certain respects considerably increased the work of this section of the Office. The existing bye-laws are modified by the fact that no boy is to be employed in Street Trading under the age of 16. The Committee are considering the advisability of establishing bye-laws for young persons aged 16-18 years. It is as yet too early to estimate the number of cases which will have to be dealt with in connection with the care or protection of young persons and the new employment sections of the Act.

Six children attending the Secondary Schools of the City have been found employed out of school hours, and the parents were warned as to the breach of the agreement.

(b) The co-ordination of the work of the School Medical Service with that of the Juvenile Employment Bureau is carried out as far as possible: previous to leaving school a Juvenile Employment Card is completed for each child, on which is entered particulars respecting the physical condition, height, hearing, eyesight, and general health. These particulars are taken into consideration in deciding what occupation a child is suitable for. In exceptional cases, children are medically examined by the Chief Assistant School Medical Officer at the request of the Officer-in-Charge of the Bureau.

The following information has been taken from the Annual Report of the Juvenile Employment Bureau for the year ended 31st July, 1933:—

It is the Twenty-first Annual Report issued by the Committee and gives a broad outline of the activities and the progress made since the scheme first came into operation in the year 1913. A comparison of the figures for the nine years ended 31st July, 1933, during which the work was performed by the Authority, with those of the previous nine years under the dual scheme will be of interest.

During the nine years to 31st July, 1924 (dual scheme):—

<i>Number of Registrations</i>	<i>Number of Placings</i>
14,896	5,408

During the nine years from 1st August, 1924 to 31st July, 1933:—

<i>Number of Registrations</i>	<i>Number of Placings</i>
41,678	14,447

It will thus be seen that the number of registrations and placings has been trebled during the latter period.

During the last few years, also, it is to be recorded that the number of placings has steadily increased year by year and that during the period ended 31st July, 1933, the Committee is able to report a larger number of placings than in any previous year.

The placings during the last few years have been:—

Year ending 31st July, 1929	...	...	...	...	1,531
Year ending 31st July, 1930	...	...	...	...	1,454
Year ending 31st July, 1931	...	...	...	...	1,824
Year ending 31st July, 1932	...	...	...	...	2,305
Year ending 31st July, 1933	...	...	...	...	2,520

It is a rather striking fact that the last figure was reached during a period when the number of school leavers was, for reasons well known, the lowest on record, being 112 less than the previous year.

This steadily consistent progress may fairly be attributed to the fact that the Bureau's services have become very widely recognised by parents as a reliable source of advice and assistance in enabling their children on leaving School to get a fair start in life, and also by employers who find it helpful when recruiting juvenile labour for their various requirements.

The section of industry which absorbs the largest number of juveniles in Bradford is and always has been the worsted spinning. For the past fifteen months this section has been in a relatively good position, due to the tariffs on imported yarns which are forcing the hosiery firms of the Midlands and Scotland to purchase in Bradford instead of from the Continent.

There has also been a development in the electrical engineering trade. Also the textile engineering trade is in a fairly good position.

The demand for juvenile labour has a whole can be regarded as satisfactory, the register has never been high during the year and, as mentioned before, the older boys are beginning to be absorbed. The largest local electrical works has engaged a number of girls for light engineering. Another firm which specialises in automobile accessories has been employing quite a number of boys for various automatic machines and the percentage of men in this work is lower than was formerly the case.

The position of the Secondary School leavers in Bradford is still far from satisfactory. Owing to the continued depression in the export trade, the prospects of suitable positions are not good. It also appears that many firms prefer Elementary School children even for clerical work.

The principal occupations in which juveniles have been placed during the year and the relative numbers in each are here shown:—

Textiles	17.7%
Distributive Trades	25.3%
Engineering	9.2%
Clerical	13.8%
Warehouses	6.1%
	<hr/>
	72.1%

The remaining 27.9% are distributed among a large variety of other occupations such as Errand Boys, Building Trades, Plumbing, and Joinery, for Boys; and Domestic Work, Laundry, Printing, for girls. The post of errand boy or girl is not to be accepted as necessarily a "blind alley" job, as it very frequently turns out to be only probationary to more important work.

One feature of the industrial supervision is the collection of reports on children from the point of view of the employers. This information is not obtainable from any other source and its possession has frequently resulted in the giving of timely warning and advice to a child, which may have a very important bearing on its future career.

The Vocational Lectures were repeated this year. These lectures are a series of addresses by experts, on the principal occupations of the city, to the children about to leave School. The aim is to give skilled guidance to the children in the choice of a career. It is obvious that when the children have heard an outline of the different trades and openings in them, they will be in a far better position to make an intelligent selection. The Committee were again fortunate in being able to avail themselves of the services of some of the leading business men and women of the city, each an expert in his or her subject. The After-Care Visitors were invited to attend these lectures and a number availed themselves of the facilities offered.

A new feature was the introduction of the cinema as an adjunct to the lectures. Appropriate films were shown in connection with each lecture, thus adding considerably to the interest and supplementing the instruction and advice given.

During the year 71 girls, usually between the ages of 15 and 17 years, have been placed in situations in Bradford as Domestic Servants. Of these, 29, or 40 per cent. are still here and giving satisfactory service. These girls are for the most part, recruited from the Distressed Mining Areas and have received a three months' training in domestic work at one of the centres operated by the Central Committee on Women's Training in close co-operation with the Ministry of Labour Employment Exchanges.

The 18 District Committees now organised under the title of the "Association of Voluntary After-Care and Welfare Workers," have done excellent service in visiting the homes of school leavers, and the value of their work cannot be fully estimated. Without their assistance, much useful information of vital importance to the welfare of the children would never reach the Bureau.

School conferences have been held in accordance with the usual custom, school reports on those leaving school having been received as follows:—

						Boys	Girls	Total
October, 1932	..	..	..	..	..	192	205	397
December 1932	..	..	..	..	..	276	260	536
Easter, 1933	..	..	..	..	..	312	322	634
Midsummer, 1933	..	..	..	..	..	482	439	921
Totals	..	..	..	..	..	1262	1226	2488

It is expected that these figures will be increased by 1,342 next year.

The fortnightly meetings of the Rota Committee have done good work in the giving of further advice and practical assistance to juveniles placed by the Bureau.

The work in connection with the administration of the Unemployment Insurance Acts has not been so onerous this year owing to the consistently low register of juveniles claiming benefit. The Junior Instruction Centre which, owing to the number of unemployed claimants had been reduced to a "class" was closed at the end of July, 1933, the average number on the register having reached the low figure of 14.

This relief from Unemployment Insurance work gave the officers the opportunity to concentrate more definitely on "placing" work and the result has been a larger number of vacancies filled than ever before.

The following Table gives the percentage analysis of first situations since leaving School:—

(Children 14 to 16 years of age.)

Occupations.	Boys.	Girls	Total.	%
Building Trades	29	—	29	1.2
Cardboard Box Making	—	11	11	.4
Clerical	113	127	240	9.7
Clothing Manufacture	3	113	116	4.7
Distributive Trades	257	153	410	16.5
Domestic Service	—	10	10	.4
Engineering Trades	126	16	142	5.7
Laundry	—	16	16	.6
Leather Work	5	3	8	.3
Packing	7	21	28	1.1
Pages	5	3	8	.3
Printing	13	33	46	1.8
Professional	22	12	34	1.4
Railway Service	5	—	5	.2
Textile Industries	377	532	909	36.5
Tramways	22	—	22	.9
Warehouse	60	10	70	2.8
Woodwork	49	5	54	2.2
Wool Trade	10	—	10	.4
Miscellaneous	12	10	22	.9
Unknown	129	133	262	10.5
For Further Education	18	18	36	1.5
Totals	1,262	1,226	2,488	100.0

The following Table gives percentage analysis of placings by the Bureau:—

(This Table includes all boys and girls, 14 to 18 years of age.)

Occupations.	Boys.	Girls.	Total.	%
Building Trades	21	—	21	·8
Cardboard Box Making	2	35	37	1·5
Clerical	138	209	347	13·8
Clothing Manufacture	4	140	144	5·7
Distributive Trades	389	249	638	25·3
Domestic Service	—	98	98	3·9
Engineering Trades	184	48	232	9·2
G.P.O.	8	2	10	·4
Labouring	23	—	23	·9
Laundry	—	11	11	·4
Leather Work	7	5	12	·5
Municipal Service	14	5	19	·7
Packing	11	31	42	1·7
Pages	14	12	26	1·0
Pattern Room	7	2	9	·4
Printing	6	28	34	1·4
Professional	10	8	18	·7
Railway Service	10	—	10	·4
Textile Industries	188	257	445	17·7
Tramways	41	—	41	1·6
Warehouse	131	23	154	6·1
Woodwork	44	1	45	1·8
Wool Trade	64	—	64	2·5
Miscellaneous	17	23	40	1·6
Totals	1,333	1,187	2,520	100·0

(c) The findings of the School Medical Service as regards the physical conditions of employed children and young persons.

Children employed in Public Entertainments.—Full particulars of the routine system of the medical examination of children selected by the Managements for employment at the Pantomimes in the Theatres have been given in previous reports.

During the year 1933, 29 licences were granted to Bradford children to take part in Pantomimes at Bradford and Leeds. These children were examined in October, and strict particulars taken of height, weight, etc. The children were re-inspected in February, 1934, and the average gain was: height 4 inch, weight 2·19 lbs. with a very marked improvement in hæmoglobin.

In the Table given on page 18 (object of examination) it will be noticed that 75 children were medically examined for the above purposes; that figure includes children examined in February, 1933, at the conclusion of the 1933 Pantomime and those examined in October, 1933, for the 1933-34 Pantomime.

It will also be noticed in that Table that 17 boys were medically examined respecting their physical fitness for the Printing Trades, etc., and 3 boys *re* Street Trading. These were all found to be physically fit. Excepting a few cases of children desirous of leaving Special Schools, between the ages of 14 and 16 years of age in order to take up suitable employment, these were the only examinations carried out respecting employment during the year 1933.

21. STATISTICAL TABLES.—The numbers of scholars on the registers of the Schools in the City on June 30th, 1933, were as follows :—

Type of School					Number of children on Register	Average Attendance
Elementary Schools	...	...	...	...	37278	32774
Secondary Schools	...	...	...	...	3908	3675
Central Schools	...	...	...	...	513	474
Special Schools	...	...	...	...	1084	930
Nursery Schools	...	...	...	...	520	342
Totals	...	...	...	...	43303	38195

In addition to the above, there were 85 pupils on the register at the Junior Technical School (College of Art and Crafts) with an average attendance of 78, and 1,861 on the registers at the four "Non-provided, but Aided" Grammar Schools in the city with an average attendance of 1,742.

TABLE I
RETURN OF MEDICAL INSPECTION

A.—ROUTINE MEDICAL INSPECTIONS.

Code Group	Boys	Girls	Total
Entrants	2104	2142	4246
Intermediates	2022	2011	4033
Leavers	1665	1705	3370
Totals	5791	5858	11649
Other Routine Inspections:			
Other Ages	446	474	920
Candidates for Secondary Schools	522	543	1065
Totals	968	1017	1985
Special Schools	112	143	255
Nursery Schools ...	237	243	480

SECONDARY SCHOOLS.

Sex	Student Teachers and Bursars.	Routine Inspections.									Grand Total
		10	11	12	13	14	15	16	over 16	Total	
Boys ...	41	19	146	511	691	451	330	114	102	2364	2405
Girls ...	64	24	63	448	592	380	291	122	81	2001	2065
Total ...	105	43	209	959	1283	831	621	236	183	4365	4470

B.—OTHER INSPECTIONS.

1. <i>Elementary Schools:</i>	Special Inspections	...	...	12436
	Re-inspections	...	...	9436
	Total	...	...	21872
2. <i>Secondary Schools:</i>	Special Inspections	...	...	1520
	Re-inspections	...	...	3511
	Total	...	...	5031
3. <i>Special Schools:</i>	Special Inspections	...	...	1960
	Re-inspections	...	...	2595
	Total	...	...	4555
4. <i>Nursery Schools:</i>	Special Inspections	...	...	889
	Re-inspections	...	...	1120
	Total	...	...	2009

TABLE II
RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION
IN THE YEAR ENDED, 31ST DECEMBER, 1933.

Defect or Disease	Elementary Schools				Secondary Schools			
	Routine Inspection		Special Inspection		Routine Inspection		Special Inspection	
	No. of Defects		No. of Defects		No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Malnutrition	448	36	349	2	55	1	14	—
Skin :								
Ringworm, Head	10	—	50	4	1	—	1	—
Ringworm, Body	15	—	74	—	—	—	2	—
Scabies	39	—	99	—	4	—	18	—
Impetigo	81	1	827	—	7	—	16	—
Other Diseases (Non-T.B.)	244	17	569	2	100	17	48	—
Eye :								
Blepharitis	114	3	117	—	13	—	11	—
Conjunctivitis	23	—	113	—	6	1	9	—
Keratitis	5	1	—	1	—	—	—	—
Corneal Ulcer	1	1	4	—	—	—	—	—
Corneal Opacities	1	1	—	—	—	—	—	—
Defective Vision	816	609	1533	93	635	524	460	17
Squint	110	107	191	15	4	15	3	—
Other Conditions	41	18	340	10	9	3	13	—
Ear :								
Defective Hearing	48	8	39	2	11	7	3	—
Otitis Media	70	8	376	1	13	3	26	—
Other Ear Diseases	14	—	210	2	1	1	41	—
Nose and Throat :								
Enlarged Tonsils	1373	477	98	5	139	133	9	1
Adenoids	68	3	11	—	6	—	—	—
Enlarged Tonsils and Adenoids	242	7	207	4	4	—	5	—
Other Conditions	310	30	680	5	50	3	13	—
Enlarged Cervical Glands (Non-T.B.)	575	96	20	1	71	9	3	—
Defective Speech	14	35	2	5	4	4	—	—
Dental Disease (see IV., Group V.)	241	12	120	—	23	3	8	—

TABLE II—*continued.*

Defect or Disease	Elementary Schools				Secondary Schools			
	Routine Inspection		Special Inspection		Routine Inspection		Special Inspection	
	No. of Defects		No. of Defects		No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Heart and Circulation :								
Heart Disease Organic	143	43	10	11	23	25	2	2
Functional	93	131	13	20	25	45	2	3
Anæmia	645	44	433	11	163	37	13	1
Lungs :								
Bronchitis	322	7	605	7	10	2	7	—
Other Non-T.B. Dis- eases	247	47	482	3	17	11	8	—
Tuberculosis :								
Pulmonary Definite	—	—	6	1	—	—	—	—
Pulmonary Suspected	9	3	60	13	—	—	—	1
Non-Pulmonary—								
Glands	2	—	1	—	1	1	—	—
Bones and Joints...	—	2	6	1	—	—	—	—
Skin	—	—	—	—	—	—	—	—
Other Forms	2	—	19	—	—	—	—	1
Nervous System :—								
Epilepsy	7	9	12	13	—	—	1	2
Chorea	56	14	128	23	4	1	2	1
Other Conditions ...	127	26	88	3	26	6	2	—
Deformities :—								
Rickets	43	60	2	—	4	34	—	—
Spinal Curvature ...	310	48	7	1	66	37	—	—
Other Forms	170	108	33	8	61	49	11	1
Other Defects and Diseases (excluding Uncleanliness) ...	729	134	7875	157	187	72	480	4
Totals	7808	2146	15809	424	1743	1044	1231	34

TABLE II

RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN
THE YEAR ENDED 31st DECEMBER, 1933.

Defect or Disease	Special Schools				Nursery Schools			
	Routine Inspection		Special Inspection		Routine Inspection		Special Inspection	
	No. of Defects		No. of Defects		No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Malnutrition	6	—	1	1	23	5	—	—
Skin:								
Ringworm, Head	—	—	2	—	—	—	2	—
Ringworm, Body	—	—	1	—	—	—	2	—
Scabies	—	—	11	—	5	—	—	—
Impetigo	—	—	61	—	10	—	20	—
Other Diseases (Non-T.B.)	9	2	26	—	24	2	7	—
Eye:								
Blepharitis	3	—	25	—	11	—	—	—
Conjunctivitis	1	—	11	—	—	—	1	—
Keratitis	4	—	—	—	—	—	—	—
Corneal Ulcers	—	—	—	—	—	—	—	—
Corneal Opacities	3	—	—	—	1	—	—	—
Defective Vision	4	20	222	16	—	—	—	1
Squint	1	3	5	—	11	16	6	—
Other Conditions	9	2	20	—	1	—	6	—
Ear:								
Defective Hearing	1	1	2	1	3	—	2	—
Otitis Media	1	—	53	—	15	2	20	—
Other Ear Diseases	—	—	19	—	1	—	4	—
Nose and Throat:								
Enlarged Tonsils... ..	10	9	15	—	133	63	—	2
Adenoids	1	—	—	1	6	1	—	—
Enlarged Tonsils and Adenoids	1	—	—	1	21	2	5	—
Other Conditions	1	3	93	—	39	3	—	—
Enlarged Cervical Glands (Non T.B.)	11	2	52	1	17	5	—	—
Defective Speech	1	1	—	—	1	2	—	—
Dental Disease (<i>see</i> Table IV, Group V)	1	—	16	—	14	3	—	—

TABLE II—*continued.*

Defect or Disease	Special Schools				Nursery Schools			
	Routine Inspection		Special Inspection		Routine Inspection		Special Inspection	
	No. of Defects		No. of Defects		No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Heart and Circulation:								
Heart Disease, Organic...	1	—	6	11	5	4	—	1
Heart Disease, Functional	7	—	1	6	1	9	—	—
Anæmia	13	—	9	2	41	5	—	—
Lungs:								
Bronchitis	3	—	12	1	43	2	—	—
Other Non T.B. Diseases	3	1	25	1	21	6	—	—
Tuberculosis:								
Pulmonary, Definite ...	—	—	2	—	—	—	—	—
Pulmonary, Suspected ...	—	—	6	1	—	—	1	—
Non-Pulmonary:								
Glands	—	—	2	—	—	—	—	—
Bones and Joints	—	—	—	—	—	—	—	—
Skin	—	—	—	—	—	—	—	—
Other Forms	—	—	1	—	—	—	—	—
Nervous System:								
Epilepsy	—	1	—	3	—	—	—	—
Chorea	—	1	5	1	1	1	—	—
Other Conditions	—	—	5	—	1	1	1	—
Deformities:								
Rickets	1	1	—	—	20	16	—	1
Spinal Curvature	2	1	2	1	—	—	—	—
Other Forms	2	7	7	9	12	10	—	1
Other Defects and Diseases (excluding Uncleanliness)	11	—	931	29	71	11	65	3
Totals	111	55	1649	86	552	169	142	9

TABLE II—*continued*.

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASE).

Group	Number of Children		Percentage of Children found to require Treatment
	Inspected	Found to Require Treatment	
Code Groups :—			
Entrants	4246	1902	44·70
Intermediates	4033	1625	40·29
Leavers	3370	1249	37·06
Total (Code Groups)	11649	4776	41·00
Other Routine Inspections:			
Other Ages	920	386	41·96
Candidates for Secondary Schools	1065	279	26·20
Total (Other Routine Inspections)	1985	665	33·50
Secondary Schools (Routine Inspections including other ages, and Bursars)...	4470	1316	29·49
Special Schools	255	80	31·37
Nursery Schools	480	210	43·75

TABLE III

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

BLIND CHILDREN.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
11	—	—	1	12

PARTIALLY BLIND CHILDREN.

At Certified Schools for the Blind.	At Certified Schools for the Partially Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	136	34	—	2	172

DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
37	1	—	1	39

PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
7	—	2	—	1	10

MENTALLY DEFECTIVE CHILDREN—FEEBLE-MINDED CHILDREN.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
106	2	1	14	123

EPILEPTIC CHILDREN—CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
5	—	—	3	8

TABLE III—*continued*.

PHYSICALLY DEFECTIVE CHILDREN.

A. Tuberculous Children:—

1.—Children Suffering from Pulmonary Tuberculosis
(including pleura and intra-thoracic glands).

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
18	—	1	3	22

2.—Children Suffering from Non-Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
7	—	3	6	16

B. Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
575	598	2	16	1191

C. Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
145	3	—	7	155

D. Children with Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
74	5	—	5	84

TABLE III—*continued*.

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Sex.	Combination of Defects.	Type of School or Institution.
1 boy	Mentally Defective and Cripple	At no School
1 girl	Mentally Defective and Cripple	At no School
1 girl	Mentally Defective and Cripple	Certified School for Mentally Defectives
1 girl	Mentally Defective and Epileptic	At no School
1 girl	Blind and Cripple	At no School
1 boy	Blind and Epileptic	At no School
1 boy	Blind and Epileptic	At no School
1 boy	Blind and Epileptic	Mental Institution

TABLE IV.
RETURN OF DEFECTS TREATED DURING THE YEAR ENDED
31ST DECEMBER, 1933.

TREATMENT TABLE: ELEMENTARY SCHOOLS.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Group VI).

Disease or Defect	Number of Defects treated, or under treatment during the year		
	Under Local Authority's Scheme	Other-wise	Total
Skin :—			
Ringworm, Scalp (figure in brackets are those treated with X-Rays).	49 (39)	1	50
Ringworm, Body	83	1	84
Scabies	138	—	138
Impetigo	892	7	899
Other Skin Diseases	715	14	729
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group II)	708	17	725
Minor Ear Defects	686	24	710
Miscellaneous :—			
(e.g., Minor Injuries, Bruises, Sores, Chil-blains, etc.)	4671	16	4687
Totals	7942	80	8022

SECONDARY SCHOOLS.

Disease or Defect	Number of Defects treated, or under treatment during the year		
	Under Local Authority's Scheme	Other-wise	Total
Skin :—			
Ringworm, Scalp	1	—	1
Ringworm, Body	2	—	2
Scabies	21	1	22
Impetigo	19	—	19
Other Skin Diseases	98	11	109
Minor Eye Defects :—			
(External and other, but excluding cases falling in Group II)	46	2	48
Minor Ear Defects	83	3	86
Miscellaneous :—			
(e.g., Minor Injuries, Bruises, Sores, Chil-blains, etc.)	323	2	325
Totals	593	19	612

TABLE IV—GROUP 1—*continued*.

SPECIAL SCHOOLS.

Defect or Disease	Number of Defects treated, or under treatment, during the year		
	Under Local Authority's Scheme	Otherwise	Total
Skin:			
Ringworm, Scalp	2	—	2
Ringworm, Body	1	—	1
Scabies	11	—	11
Impetigo	61	—	61
Other Skin Diseases	33	—	33
Minor Eye Defects (External and other, but excluding cases falling in Group II) ...	69	—	69
Minor Ear Defects	74	—	74
Miscellaneous (e.g. Minor Injuries, Bruises, Sores, Chilblains, etc.)	785	—	785
Totals	1036	—	1036

NURSERY SCHOOLS.

Defect or Disease	Number of Defects treated, or under treatment, during the year		
	Under Local Authority's Scheme	Otherwise	Total
Skin:			
Ringworm, Head (figure in brackets indicates treated by X-rays)	1 (1)	—	1
Ringworm, Body	1	—	1
Scabies	1	1	2
Impetigo	28	—	28
Other Skin Diseases	22	6	28
Minor Eye Defects (External and other, but excluding cases falling in Group II) ...	13	1	14
Minor Ear Defects	42	1	43
Miscellaneous (e.g. Minor Injuries, Bruises, Sores, Chilblains, etc.)	64	—	64
Totals	172	9	181

GROUP II—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

ELEMENTARY SCHOOLS.

Defect or Disease.	No. of Defects dealt with.				No. of Children for whom Spectacles were			
	Under the Authority's Scheme.	By Private Practitioner or at Hospital, apart from Authority's Scheme.	Otherwise.	Total.	Prescribed		Obtained	
					Under the Authority's Scheme.	Otherwise.	Under the Authority's Scheme.	Otherwise.
Errors of Refraction (including Squint) (Operations for Squint are recorded separately in the Body of the Report) ...	2514	51	3	2568	1875	12	1867	12
Other Defect or Disease of the Eye (excluding those recorded in Group I)... ..	5	—	—	5	5	—	5	—
Total ...	2519	51	3	2573				

SECONDARY SCHOOLS.

Errors of Refraction (including Squint) (Operations for Squint are recorded separately in the Body of the Report) ...	715	97	4	816	397	2	397	2
Other Defect or Disease of the Eye (excluding those recorded in Group I)... ..	5	1	—	6	3	—	3	—
Total ...	720	98	4	822				

TABLE IV—*continued.*

GROUP II.—(Cont.).

SPECIAL SCHOOLS.

Defect or Disease.	No. of Defects dealt with.				No. of Children for whom Spectacles were			
	Under the Authority's Scheme.	By Private Practitioner or at Hospital, apart from Authority's Scheme.	Otherwise.	Total.	Prescribed		Obtained	
					Under the Authority's Scheme.	Otherwise.	Under the Authority's Scheme.	Otherwise.
Errors of Refraction (including Squint) (Operations for Squint are recorded separately in the Body of the Report) ...	218	—	—	218	110	—	110	—
Other Defect or Disease of the Eye (excluding those recorded in Group I)... ..	—	—	—	—	—	—	—	—
Total ...	218	—	—	218				

NURSERY SCHOOLS.

Errors of Refraction (including Squint) (Operations for Squint are recorded separately in the Body of the Report) ...	15	—	—	15	15	—	15	—
Other Defect or Disease of the Eye (excluding those recorded in Group I)... ..	—	—	—	—	—	—	—	—
Total ...	15	—	—	15				

TABLE IV—*continued.*

GROUP III—Treatment of Defects of Nose and Throat.

Number of Defects.														
Received Operative Treatment.													Received other forms of treatment	Total number treated.
	Under the Authority's Scheme in Clinic or Hospital.				By Private Practitioner, or Hospital, apart from the Authority's Scheme.				Total.					
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)		
Elementary Schools	...	7	563	2	2	31			9	594	2		1805	2410
Secondary Schools	...	1	15			2			1	17			107	125
Special Schools	...		10							10			121	131
Nursery Schools			33			1				34			41	75

(1) Tonsils only.

(2) Adenoids only.

(3) Tonsils and Adenoids.

(4) Other defects of the nose and throat.

TABLE IV—*continued*.

GROUP IV—Orthopædic and Postural Defects. Elementary Schools.

	Under the Authority's Scheme.			Otherwise.			Total number
	Residential treatment with education.	Residential treatment without education.	Non-residential treatment at an Orthopædic Clinic.	Residential treatment with education.	Residential treatment without education.	Non-residential treatment at an Orthopædic Clinic.	
Number of Children treated ...	—	—	201	—	—	20	221
Secondary Schools:—							
Number of Children treated ...	—	—	48	—	—	12	60
Special Schools:—							
Number of Children treated ...	—	—	124	—	—	—	124
Nursery Schools:—							
Number of Children treated ...	—	—	5	—	—	2	7

GROUP V—Dental Defects.

ELEMENTARY SCHOOLS

(1) Number of children who were :—

(a) Inspected by the Dentist:

				<i>Aged</i>		
Routine Age Groups				3	...	174
				4	...	432
				5	...	938
				6	...	1023
				7	...	1016
				8	...	1174
				9	...	1174
				10	...	1342
				11	...	1175
				12	...	1159
				13	...	928
				14	...	99
				Total		10634
Specials	...	...	...	...	...	5622
Grand Total				...	...	<u>16256</u>

TABLE IV—*continued.*

(b) Found to require treatment	...	13441
(c) Actually treated	... ..	8809
(d) Re-treated during the year as the result of periodical examination	...	1107
(2) Number of Half-days devoted to Inspection	134	
Treatment	... .. 1145	
	—	1279
(3) Attendances made by children for treatment		9916
(4) Fillings, Permanent Teeth	... .. 1719	
Temporary Teeth	... .. 253	
	—	1972
(5) Extractions, Permanent Teeth	... .. 3564	
Temporary Teeth	... .. 11904	
	—	15468
(6) Administrations of general anæsthetics for extractions	... ..	2490
(7) Other Operations, Permanent Teeth	... .. 141	
Temporary Teeth	... .. 460	
	—	601

SECONDARY SCHOOLS.

(1) Number of children who were :—		
(a) Inspected by the Dentist		—
Specials	... ..	862
	—	
Grand Total	... ..	862
(b) Found to require treatment	...	862
(c) Actually treated	... ..	862
(d) Re-treated during the year as the result of periodical examination	...	304
(2) Half-days devoted to Inspection	... ..	—
Treatment	... .. 37	
	—	37
(3) Attendances made by children for treatment		1166
(4) Fillings, Permanent Teeth	... .. 785	
Temporary Teeth...	... .. 2	
	—	787
(5) Extractions, Permanent Teeth	... .. 864	
Temporary Teeth	... .. 198	
	—	1062
(6) Administrations of general anæsthetics for extractions	... ..	227
(7) Other Operations, Permanent Teeth	... .. 42	
Temporary Teeth	... .. 13	
	—	55

TABLE IV—*continued.*

GROUP VI—Uncleanliness and Verminous Conditions.

ELEMENTARY SCHOOLS.

(1) Average number of visits per school made during the year by the School Nurses	10.8
(2) Total number of examinations of children in the School by the School Nurses	139315
(3) Number of individual children found unclean	1438
(4) Number of children cleansed under arrangements made by the Local Education Authority	88
(5) Number of cases in which legal proceedings were taken :—	
(a) Under the Education Act, 1921	—
(b) Under the School Attendance Byelaws	—

SECONDARY SCHOOLS:

(1) Average number of visits per school made during the year by the School Nurses	11.8
(2) Total number of examinations of children in the Schools by the School Nurses	4325
(3) Number of individual children found unclean	2
(4) Number of children cleansed under arrangements made by the Local Education Authority	1
(5) Number of cases in which legal proceedings were taken—	
(a) Under the Education Act, 1921	—
(b) Under the School Attendance Byelaws	—

SPECIAL SCHOOLS:

(1) Average number of visits per school made during the year by the School Nurses	36.2
(2) Total number of examinations of children in the schools by the School Nurses	8467
(3) Number of individual children found unclean	51
(4) Number of children cleansed under arrangements made by the Local Education Authority	23
(5) Number of cases in which legal proceedings were taken—	
(a) Under the Education Act, 1921	—
(b) Under the School Attendance Byelaws	—

TABLE IV—*continued*.

NURSERY SCHOOLS:

(1) Average number of visits per school made during the year by the School Nurses	...	...	...	...	...	30.9
(2) Total number of examinations of children in the schools by the School Nurses	...	...	...	...	...	8243
(3) Number of individual children found unclean	...	...				47
(4) Number of children cleansed under arrangements made by the Local Education Authority	...	...	...			—
(5) Number of cases in which legal proceedings were taken—						
(a) Under the Education Act, 1921	...	...	...			—
(b) Under the School Attendance Byelaws	...	...				—

TABLE V. AVERAGE HEIGHTS AND WEIGHTS.

Age	Total Number Examined		Leavers, Intermediates and Other Ages				Candidates for Junior Scholarships				Secondary School Children			
	Males	Females	Males		Females		Males		Females		Males		Females	
			Height CMS.	Weight Kilos.	Height CMS.	Weight Kilos.	Height CMS.	Weight Kilos.	Height CMS.	Weight Kilos.	Height CMS.	Weight Kilos.	Height CMS.	Weight Kilos.
8	1630	1586	122.5	24.7	122.1	24.5	—	—	—	—	—	—	—	—
9	392	425	126.4	27.0	126.2	25.5	—	—	—	—	—	—	—	—
10	427	424	130.6	28.2	131.7	28.8	135.9	30.7	136.5	30.25	—	—	—	—
11	441	422	132.2	31.6	136.7	31.1	138.0	31.5	138.1	31.6	141.8	34.4	145.0	37.2
12	1877	1777	140.7	35.0	142.7	36.0	141.5	33.4	145.6	35.8	144.3	35.7	147.0	38.4
13	1007	955	143.4	36.9	145.7	37.9	—	—	—	—	150.6	41.1	151.0	43.1
14	479	428	151.7	43.1	157.2	42.4	—	—	—	—	154.6	43.9	153.7	45.4
15	330	291	—	—	—	—	—	—	—	—	161.5	49.9	157.3	49.8
16	114	122	—	—	—	—	—	—	—	—	167.8	55.7	158.6	52.2
17 and over	102	81	—	—	—	—	—	—	—	—	172.3	59.6	161.7	59.6

AVERAGE HEIGHTS AND WEIGHTS.
NURSERY SCHOOL CHILDREN.

TABLE VI.

Age	Number examined		Males		Females	
	Males	Females	Height C.M.	Weight Kilos.	Height C.M.	Weight Kilos.
2	65	79	86.25	12.7	85.2	12.6
3	79	72	89.9	14.2	92.8	14.8
4	33	32	94.6	16.2	98.1	15.2

TABLE VII.

AVERAGE HEIGHTS AND WEIGHTS. ENTRANTS.

Age	Number Examined		Males		Females	
	Males	Females	Height C.M.	Weight Kilos.	Height C.M.	Weight Kilos.
3	169	157	92.1	15.8	96.3	14.9
4	508	468	102.3	17.7	100.0	16.4
5	1042	1020	106.0	18.5	106.5	18.0
6	385	497	111.8	19.8	110.7	20.6
7	187	182	118.6	22.6	118.4	22.7

TABLE VIII.

PARENTS PRESENT AT MEDICAL INSPECTION.

Group	MALES			FEMALES		
	Number of Children Examined	Number of Parents Present	Percentage of Parents Present	Number of Children Examined	Number of Parents Present	Percentage of Parents Present
Entrants ...	2104	1758	83.6	2142	1756	82.0
Intermediates	2022	1365	67.5	2011	1546	76.9
Leavers ...	1665	541	32.5	1705	931	54.6
Other Ages	446	268	60.1	474	326	68.8
Junior						
Scholarships...	522	416	79.7	543	467	86.0
Secondary						
Schools ...	2364	39	1.6	2001	442	22.1

INDEX

	PAGE
Acreeage	5
Ambulance Work and Disinfection	151
Ante-Natal Work	96
Anthrax	53
Anti-Tuberculosis Centre	59
Bacteriological and Pathological Work	105
Bakehouses	45
Bierley Hall Sanatorium	70
Births	6
Births in Wards	7
Birth Rates in Wards	7
Births, Registration and Notifica- tion of	99
Births, Visitation of	100
Blind, Deaf, Defective and Epi- leptic Children	190
Board of Education Tables	220-240
Bronchitis	83
Canal Boats	27
Cancer and Malignant Disease	75
Cerebro Spinal Fever	84
Child Centres	101
Cinemas, &c., Inspection of	27
Closet Accommodation and Scavenging	15
Committee, Members of	159
Common Lodging Houses	26
Crematorium	151
Deaf School	192
Deaths	6
Deaths at Different Age Periods...	8
Death Rates in Wards	7
Deaths in Public Institutions	10
Deaths, Certification of	11
Deaths of Women in Childbirth	97
Dental, General Work	150
Dental Treatment of School Children	183
Diarrhoea	50
Diphtheria	47
Disinfection	151
Drainage and Sewerage	15
Early Childhood	103

	PAGE
Employment of Children and Young Persons	212
Encephalitis Lethargica	84
Enteric Fever	48
Erysipelas	53
Factories, Workshops and Work- places	22
Fish Friers Premises	44
Food, Inspection of	30
Food and Drugs Adulteration Act, etc.	34
Grassington Sanatorium	63
Grassington Sanatorium School	200
Heart Disease	83
Home Helps	104
Hospital Accommodation	113
Housing	141-149
Housing Statistics... ..	149
Ice Cream	44
Illegitimacy	6, 86
Infancy	99
Infantile Mortality	85-93
Infantile Mortality, Age Dis- tribution of	85
Infantile Mortality and Illegiti- macy	86
Infantile Mortality, Place Dis- tribution of	87
Infantile Mortality, Causes of Death in	87
Infantile Mortality, Comparison with other Great Towns	90
Infectious Diseases	47
Infectious Diseases Hospitals	128
Influenza	53
Inquests	12
Leeds Road Hospital	128-140
Lister Lane School for Physical Defectives	193
Malignant Diseases	75
Maternity and Child Welfare	94-104
Maternity and Child Welfare, voluntary work in connection with	104
Maternity Cases, Accommodation for	98

INDEX—*continued*

	PAGE
Maternity	94
Measles	53
Meat Inspection	38
Medical Inspection of School	
Children	163
Medical Gymnastics and Massage	177
Medical Treatment of School	
Children	172
Mentally Defective School ...	196
Midwives, Supervision of ...	94
Milk Supply	30
Milk Shops, Dairies, and Pur-	
veyors of Milk	32
Milk, Chemical Examination of ...	33
Milk, Bacteriological Examination	
of	33
Milk and Dairies Order, 1926 ...	31
Municipal Midwives	95
Municipal General Hospital	113-127
Myope School	191
New Houses	141
Nursery Schools	202
Offensive Trades, etc.	27
Open Air Education of School	
Children	186
Ophthalmic Treatment of School	
Children	184
Organic Heart Disease	83
Orthopaedic Cases	185
Other forms of Tuberculosis ...	56
Overcrowding	142
Pathological Work	105
Pneumonia	83
Polio-Encephalitis, Acute	84
Population	5
Population, Distribution and Den-	
sity of	5
Prevalence and Control of Disease	47
Public Assistance	9
Public Mortuary	151

	PAGE
Puerperal Fever and Puerperal	
Pyrexia	52
Pulmonary Tuberculosis	55
Rag Flock Act, 1911-1928	26
Report of School Medical Officer	160
Respiratory Diseases	83
Rheumatic Fever	83
Sanitary Circumstances of Brad-	
ford	14-29
Sanitary Inspection of District ...	17
Scarlet Fever	49
School Medical Officer's Report...	161
School Hygiene	162
Schools, Sanitary Inspection of ...	27
Shell fish	42
Shops Acts 1912-1930	23
Slaughterhouses	38
Slum Clearance & Re-conditioning	144
Smallpox	49
Smoke Abatement	27
Still Births	96
Throat, Nose, and Ear Cases ...	138
Tuberculosis	54
Tuberculosis, Other Forms of ...	56
Tuberculosis Order, 1925	30
Ultra Violet Rays Treatment ...	179
Venereal Diseases	71
Violence	84
Vital Statistics	5
Voluntary Hospitals	9
Water Supply	14
Whooping Cough	53
White Abbey Improvement	
Scheme	143
Workshop and Shop Inspection,	
etc.	22
X-ray Treatment of School	
Children	178
Young Children, Death Rate	
Among	103

